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English writing placement assessment: Implications for at-risk learners

Janis Linch Banks Fisher

ENGLISH WRITING PLACEMENT ASSESSMENT: IMPLICATIONS FOR AT-RISK LEARNERS

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

English Composition

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ABSTRACT

This thesis reviews literature regarding English writing placement assessment and its impact on at-risk (under-prepared) college students. Four primary viewpoints are discussed: 1) assessment inequitably discourages and drives out students; 2) assessment is useless because the process is flawed; 3) assessment is necessary but pre-baccalaureate courses are economically wasteful; 4) assessment helps place students to ensure success. No strong consensus was found in the literature. The thesis also details results of an original data analysis of the 1990-1991 incoming freshmen class at California State University, San Bernardino. The study was conducted to determine whether or not at-risk students, that is, those students who test below college level on the English Placement Test, seem to be helped or harmed by assessment, subsequent placement and pre-baccalaureate course work, or whether there is a clear answer. Students' academic careers were followed through the spring quarter of 1998. Visual Basic software and documentation are included for future data analysis. Data suggest that the assessment-placement-pre-baccalaureate course work process may

contribute positively to at-risk students' success providing they follow the program placement specifications and take the necessary course work. Specifically, data analysis reveals a successful pass rate in Freshman Composition (English 101) of 2.25:1 for at-risk students taking pre-baccalaureate course work over at-risk students who did not take the preparatory courses.

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To Mom and Dad

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CHAPTER ONE

THE CALIFORNIA STATE UNIVERSITY ENGLISH PLACEMENT TEST AND AT-RISK STUDENTS

The Help or Harm Issue

Students accepted at California State University campuses must take the English Placement Test (EPT) and the Elementary Level Math (ELM) Test (unless exempt) before they may register for classes. Therefore, the stated purpose of the EPT is placement, that is, to correctly place students into classes that are challenging, but manageable (White, Teaching 194). However, some critics have charged that although the requirement may perform a useful sorting function, it also disadvantages at-risk students. Alternatives to the EPT or the exploration of an abolitionist viewpoint are not included here. Specifically, the focus of this thesis is the impact of the EPT on at-risk students.

All students entering the CSU system are required to participate in a single system-wide writing placement assessment (CSU Home Page), which is administered after

students are accepted at any of the CSU campuses and before they register. The English Placement Test (EPT) consists of an impromptu essay portion and a section of multiple-choice questions.

Students who refuse to write the test face exclusion from the university system unless they are granted exemption from the process. The top of the CSU Home Page in the General Information section on the World Wide Web states in bold face type, "**If you are required to take the EPT and the ELM but fail to do so, you will not be allowed to register.**" Continuing, it reads, "If you do not perform well on the tests, you will be placed in an appropriate remedial or developmental program or activity during your first term of enrollment." Thus, the special category of at-risk special-admit learners, or those who enter the university as economically disadvantaged and lacking one or perhaps two semesters of precollegiate work (Newman 1), are, like all entering students, caught up in the writing assessment process.

Exemption from the EPT may be granted only through acceptable performance on standardized tests such as the ACT and SAT, or on the AP (advanced placement) exam for

English, or the completed freshman composition requirement at another college or university (Bulletin 68). Exemption from the precollegiate preparation classes is not allowed; students are required to attend and successfully complete the assigned pre-baccalaureate writing course or courses on a CSU campus before they can register for the required English 101. Thus, the English Placement Test is the university tool for placing students in English courses. Currently, it is used only as a placement tool and not as an exclusionary device. That is, admission is not rescinded even if students score in the bottom quartile of the EPT. However, it may have an exclusionary effect if students refuse to take the test or do not complete the assigned pre-baccalaureate courses.

To ensure accuracy in placement, the test has been validated; that is, it has been checked for accuracy to ascertain whether it does, in fact, measure what it is purported to measure. According to a 1993 validity study:

> Since 1977, the California State University has used the English Placement Test, developed cooperatively by CSU faculty and the Educational Testing Service (ETS), to place newly admitted

students into appropriate English courses. This test has been designed to assess the level of analytical reading and writing skills of students. The test consists of a sixty-minute multiple-choice section (with two subsections: reading skills and composing skills) and a forty-five minute essay. The essay portion of the test requires students to read a brief prompt about a general topic or issue; they must then take and explain a position, drawing upon personal experience, observation, or reading. Each essay is read and scored by two faculty in a system-wide scoring session. Scores are reported for each of the subsections of the test, as well as a total combined score. Based on their performance on the test, students are placed directly into a regular freshman English course, or in developmental courses one or two levels below freshman English. (Noreen & Bianchini 1)

This placement vehicle thus measures the students' English proficiency level as well as their skills in handling both objective and essay tests.

EPT results are widely accepted throughout the California State University system. The 1993 study abstract states:

> The study concludes that the percents of appropriately placed students systemwide are estimated to be 87.2%, 78.4%, and 95.3% for Freshman English, the higher developmental English course, and the lower developmental English course respectively. (Noreen & Bianchini ii)

Ensuring validity is especially important because without validity the English Placement Test would be subject to challenge by students who did not wish to abide by its placement levels.

To understand the significance of the EPT, we should first understand a bit of its history. According to Edward M. White, writing in the January 2001, issue of College English, the forerunner to the current test was first administered statewide in the spring of 1973, the

product of a concerted joint effort among all the CSU system English departments. It was initiated as a direct response to "an administrative move to institute an external multiple-choice test for first-year English equivalency for the entire system" (308). This 1971 prototype English Placement Test was the forerunner of the current version used in the CSU system today. The nature of its birth and its system-wide endorsement made it the first widely used instrument of what White designates in this article as the "`modern era' of writing assessment," which White defines as follows:

> This is what I mean by the "modern era" of writing assessment: a time in which, because responsible academics and scholars somehow gained actual power over the assessment of writing, the developed assessment that took place embodied current writing theory, writing research, and writing pedagogy. (309)

White further notes that the degree of cooperation among English faculty was instrumental in the implementation of its two most important tenets, which are:

> (1) there must be writing on a writing examination, and (2) English teachers who were teachers of writing should establish the goals of the examination and be responsible for designing and grading it. (309)

Thus, the application of current writing theory, the inclusion of an actual essay-writing component, and a test architecture designed and implemented by actual English faculty are all unique components of what currently constitutes the EPT in the California State University System.

The first stated intention of the EPT is to determine the college readiness of entering students; the second stated intention is to "counsel them" if they are not college ready. College-ready students at CSUSB, as determined by the EPT, are eligible for English 101, Freshman Composition. The course description reads, "Analytical study of the language and structure of prose to help students develop a clear, mature and flexible expository style. Frequent writing required. Graded A, B, C/no credit" (164). Development of analytical language study and the ability to write clearly is deemed desirable

because professors across the academic disciplines at the university expect students to be able to write clearly as well as participate in the discourse community.

Students who are not eligible for freshman composition are to be "counseled" about appropriate ways to become prepared for college-level writing. The catalog states, "The score on the EPT will determine the appropriate level English composition course for each student. Pre-baccalaureate course work may be required in preparation for the freshman composition course" (62). Pre-baccalaureate course work at CSUSB consists of two options: a two-quarter Basic English series, and a one-quarter intensive English course. Much is at stake for the students, then, on the EPT because scoring in the lowest quartile means they must take two quarters of English classes before enrolling in the universal requirement. Each quarter attended represents a considerable expenditure of time and money for the university student, and none of these pre-baccalaureate courses carries college credit toward the baccalaureate degree.

How does the EPT affect those involved with it? At-risk students, that is, under-prepared students who are more likely to drop out of the university during their first year, are vulnerable to detours in their academic careers. Minority students are disproportionately represented in the remediation process (Carter A5). Students who begin their university experience with a tenuous hold are often those most in need of the socioeconomic career enhancement a university degree confers. Therefore, writing placement assessment and the subsequent effects of the remediation process on these students are of particular interest. Specifically, I wanted to find out whether or not these results are relevant for California State University, San Bernardino. To find the answers to my inquiry, I initiated a review of assessment literature and a study (which in turn necessitated the writing of a customized computer software program). The results of my findings are included in this thesis.

Because of its unique inception and English faculty backing and involvement, administrators presently support the use of the EPT as a placement tool and not a gate-

keeping mechanism. Still, administrative attempts have been made to phase in its use as a means of excluding those unfortunate enough to test below college level. Thus, the test carries the potential to serve an elitist political agenda because system administrators are under constant pressure to conserve scarce monetary resources and because precollegiate writing programs are easy targets for monetary conservation efforts. System administrators and politicians are wont to complain about paying for the same service twice (first in the secondary schools, second at the universities) (White, Teaching 193). However, the current prevalence of these precollegiate courses and the revenues they generate make it difficult for administrators to ignore them (Shor 95).

Yet another argument regarding the role of writing placement assessment at the university involves influential politicians, legislators and some educators and their attempts to deal with limited monetary resources. In a report from the CSU Committee on Educational Policy dated July 18-19, 1995, under Agenda Item 2, the committee states: "These institutions are finding it increasingly difficult to justify spending

limited resources to teach students precollegiate skills." Under new guidelines adopted by the Board of Trustees, writing placement assessment will become a tool for implementing the exclusion of 90% of under-prepared students from all state universities by the year 2007.

Limitation of opportunity at the university could legitimately be considered harmful to at-risk students if it prevents their access to higher education. Therefore, exploration of the role of writing assessment and placement becomes even more important. White is especially concerned about the political and economic power wielded by postsecondary administrators. In Teaching and Assessing Writing he sounds a cautionary note:

> Sometimes, unfortunately, the political needs of these administrators, or even their personal career goals, lead them to assume control over assessment programs and to change them radically. For example, a placement testing program designed to help bright but poorly prepared students succeed can be changed all too

> easily into an admissions program designed to exclude such students altogether. (246)

Right now, in 2001, the California State University system clearly uses the EPT as a tool for placement in an attempt to help students succeed. The potential for harm, however, remains in the background waiting for the next proposal to cut funds for precollegiate courses and support programs.

CHAPTER TWO

LITERATURE REVIEW

Controversy

Briefly stated, there seem to be four major viewpoints about English placement assessment and subsequent precollegiate-level course work at the state university level. The first viewpoint is that assessment and subsequent placement is inherently flawed. The dangers of a single point of failure (or success) inherent in a one-test format are seen as too great to justify the cost in both human and economic terms. The second viewpoint decries the process of assessment and placement because it can inequitably discourage and drive students out of postsecondary education due to time and expense factors involved in completing precollegiate courses and the negative impact on self-image of being "not ready for college." The third viewpoint decries the economic expense of pre-baccalaureate writing courses necessary to support at-risk students' efforts to be successful at the university. The money spent on testing is seen as justified only if it allows administrators to cull out those students who do not meet the minimum university

level writing standard. If students needing pre-baccalaureate courses were denied access to the university, there would be no need for pre-baccalaureate courses and the staff and infrastructure necessary to support them. Valuable monetary resources would thus be allocated only to university level courses. The fourth viewpoint supports assessment and placement because it places students in courses that are challenging but manageable and helps them to build successively stronger thinking and writing skills.

Assessments Inherently Flawed

Examining the first viewpoint, that assessment and subsequent placement are inherently flawed and that a single number assessment is problematic, requires a close look at written arguments on the matter. Peter Elbow, who has written at length on the subject of assessment and is a prominent author and professor of English composition, believes the process of writing assessment is meaningless, particularly when it is based upon only one example of writing in an impromptu essay. Elbow is quite precise in his criticism of what he sees as a hybrid "skill"

Portfolios xiv). Elbow is speaking about writing assessment in general here, not about a specific application on a specific university entrance system.

The above argument against the writing placement assessment process is strongly countered by Edward M. White. According to White, who is speaking specifically about the process of admittance to universities in California and New Jersey, two studies emphatically support the writing placement assessment process and the subsequent required courses. One study, conducted in the California State University system between fall 1978 and spring 1981 involves fall 1978 first-time CSU freshmen. The second study was conducted in New Jersey by the New Jersey Basic Skills Council between 1984 and 1989 and involves a four-semester overview. These studies show that students who elect the assessment process and subsequently take classes to bring up needed writing skills stay in college in greater numbers than those who are assessed as needing the classes but who do not take them ("Importance" 75). Because these two eminent compositionists differ so sharply on this point, let us

look more carefully at their arguments and the arguments of others of note within the field of composition studies.

Elbow believes the issue of writing assessment is suspect, particularly when it is based upon only one example of writing in an impromptu essay. He applauds the growth of actual writing on these exams but has serious reservations about the tests themselves. While writing promotes learning about writing, which is a worthy goal, the sterilized atmosphere and unnatural settings which prevail in impromptu essay test environments are too far removed from meaningful writing activity for Elbow's ideals. Writing in the Foreword to Portfolios, Process and Product, he recites the following litany of flaws in writing assessment:

> In short, not only do most writing assessments give us an unsatisfactory picture of the student's skill, the picture they give us is of the student using a skill that most of us would not really call writing. (xiv)

Elbow's distress with writing assessment stems from his concern about the lack of writing process--a process that is much abbreviated in such assessments.

Because the timed impromptu essay provides only a single instance for evaluation of a student, Elbow also takes issue with this single-number assessment. He feels that the chances of students having an off day are too great; the results of a poor outcome are much too important. He points out that in most important decisions about students' academic or career competencies, multiple observations and examinations of actual work are the rule. We should be uneasy about the pretense to knowledge that holistic scoring of these one-shot essay tests afford. Elbow says:

> I'm only arguing against doing any more high-stakes, single-number-ranking evaluation than we absolutely need to do because it is that kind of verdict that is most likely to be untrustworthy and most likely to undermine a good learning climate. (What is English? 255)

For Elbow, learning and assessment are intrinsically linked and the learning that takes place during an impromptu essay has little to do with what the student needs for academic achievement.

Reiterating this viewpoint against single-number evaluations in a plea to substitute portfolios for holistically-scored essays, Elbow explains his concerns in his essay, "Writing Assessment: Do It Better, Do It Less" by saying, "we know too much about reading and writing to trust the quantitative scores on large-scale writing assessments:" (White, et al, Assessment 120). In addition to other concerns, what Elbow is questioning here is the validity of holistic scoring on the timed impromptu essay test.

Compositionist Maurice Scharton says, "We often define the validity of an assessment as its truth-value--the degree to which the assessment measures what it claims to measure" (White, et al, Assessment 53). However, Elbow's concerns are important to understand in the broader sense of assessment. Those in the position of authority, that is, those with the power to administer the test and take action upon the results should be vigilant with regards to how honest the test is and whether it is biased for or against a specific group or groups. At present, the EPT is a placement test, not an admissions test; this distinction is an important one with regards to

bias. The test is not used as a "gatekeeper" (exclusionary device), and any latent, undetected biases do not specifically exclude students from pursuing their higher-education goals, although students may experience a detrimental delay from pre-baccalaureate placement. When (or even if) the testing situation changes within the next decade, latent biases might well become problematic and a source for potential harm to at-risk students and other marginalized groups.

Echoing Elbow's concerns, Larry Anderson feels the timed impromptu essay has nothing to do with learning but everything to do with marking entrances, milestones and exits to the university, as well as reflecting the hierarchical thinking of faculty and administrators. Anderson lays out the problem by noting:

> Impromptu writing serves little instructional value; it is used because it serves the purposes of the institution (which then becomes reflected in our pedagogy): entrance exams, exit exams, tests of proficiency, tests of learned skills--ways to measure improvement. (25)

Anderson's evaluation of holistic essay exams would seem to support the argument that the EPT serves the interests of the institution, but not necessarily the interests of the students.

White, however, believes writing assessment is necessary precisely because it serves as a tool for helping students who are under prepared and therefore at risk. He writes in Composition in the Twenty-First Century: Crises and Change:

> I am not here concerned about the nature of the help the campus provides, whether it is a special remedial or developmental program or some kind of tutorial arrangement within the writing course; if we intend to keep college opportunities alive for the ill-prepared, we must provide some kind of help, and that means identifying those who need that help. (107)

White sees assessment and identification as necessary first steps toward helping at-risk students attain their academic objectives. He is cognizant of the many problems inherent in all tests, particularly in multiple-choice tests (as the component of the EPT), such as their

tendency to be culture-and gender-biased. Also, because of the difficulties in designing effective multiple-choice tests, White knows that they are often poorly designed. As a result, these tests do not measure what they are expected to measure at all (White, Assessment 175).

The inherent potential for test error must be considered in any placement program. In addition to mostly positive assessment and appropriate placement, some students are assessed correctly but subsequently misplaced in inappropriate courses. Such was the temporary fate of Mike Rose. His mishap occurred when he was being enrolled in Our Lady of Mercy High School in Los Angeles. Rose recounts:

> Mercy relied on a series of tests, mostly the Stanford-Binet, for placement, and somehow the results of my tests got confused with those of another student named Rose. The other Rose apparently didn't do very well, for I was placed in the vocational track, a euphemism for the bottom level. Neither I nor my parents realized what this meant. We had no sense that Business

> Math, Typing, and English-Level D were dead ends. (Lives 24)

Fortunately, the error was eventually discovered because Rose excelled in a biology class. As a result, he was placed in college preparatory classes beginning with his junior year of high school. There was a price to pay for the misplacement, however, and Rose speaks of the disquieting sudden shift and the problems he faced with his own lack of discipline, study skills and the unfamiliarity with material he should have understood (Lives 30). For Rose, for students like him, and maybe for all students, misplacement can mean the difference between success and failure in education.

Rose's situation was caused by a clerical error that occurred while he was entering secondary school. However, the potential for error does exist in large scale writing assessment at the college level. If only one student were thus affected, that student would find scant comfort in the information that the statistical probability for such a mishap must be very small--for that student the reality is a 100% probability and it is quite probable that he or

she will feel harmed. Fortunately, Rose's mishap is the only one of its kind my research uncovered.

Although not blind to the contemporary controversies surrounding essay tests, White is still much in favor of their use as placement tools for incoming university students. He continues, "Although essay tests are under attack these days, and we should not exaggerate their value, they can indeed give us some important information we can trust" (107). Thus, White indicates he is comfortable with the kind of information supplied by the impromptu essay portion of assessment instruments such as the EPT. To further define the advantages of the impromptu assessment essay, White tells us:

> Among other matters, we can be sure that the student writing on the scene is the author of the work to be evaluated. But beyond this, we can take advantage of the focus and concentration that impromptu essays require to see how students can perform under pressure. (107)

White believes there are many positive aspects to the impromptu essay portion of the EPT, just as there are

positive aspects to portfolios in other contexts. He explains his viewpoint regarding these two evaluation instruments by stating:

> Attacks on essay testing ignore its crucial value for the development of portfolios and its continued value in writing assessment as a direct measure of writing with proven reliability; these attacks weaken our position in relation to the assessment community, which insists, properly, that any measurement must be demonstrably fair if it is to be taken seriously. (108)

Clearly, in White's opinion, both portfolio assessment and the impromptu essay exam have value and in fact are supportive of each other.

As will be seen later in this work, the preponderance of evidence in the data studied seems to support a positive viewpoint regarding the impromptu essay as an assessment tool.

Negative Results

In examining the second viewpoint, the issue appears to be whether or not the assessment and placement process does in fact drive out students who otherwise might remain in college by increasing their economic and time costs and by damaging their self-esteem. No one would argue that the economic and time costs are real and that having to take pre-baccalaureate-level courses does in fact lengthen the time needed to earn a baccalaureate degree. Perhaps the designation of being "unprepared for college level" could have a negative impact on students' self-esteem, but that issue is unclear. If it takes an extra one or two quarters or semesters to learn to write at the college level, then that is time and money spent in college without the college-level credit. However, if the students try college-level courses and fail, they may lose even more time and money; this failure may be even more detrimental to their self-esteem with an "F" on their transcript. The failing grade will become part of the overall grade point average and follow students throughout their college careers and will ultimately serve as a tangible reminder of their failure. The validity of this

argument is an unknown, with anecdotal evidence found on both sides providing an unclear picture, at best.

The role that assessment plays in students' lives is perceived by them very differently than by those who administer the tests. As White, writing in Assessment of Writing, points out:

> Various marginalized groups among students, including not only racial and ethnic minorities but also the middle-aged, women, and athletes, also tend to see assessment as part of the oppressive apparatus that has traditionally worked to their detriment. (21)

It is the fear of harm from the process of assessment that may be the actual cause of harm to students who are already at a disadvantage.

This fear factor is a legitimate concern. Test anxiety can cause even the most well-prepared and articulate student to experience writer's block and subsequently fail or seriously under perform on an assessment essay. Karen L. Greenberg, writing in A Sourcebook for Basic Writing Teachers, while discussing research on the subject states, "High apprehensives, as

compared with low apprehensives, write less, use fewer qualifications, and produce texts that are judged to be inferior in overall quality (Daly, 1978; Faigley, Daly, & Witte, 1982)" (197). Thus, the assessment/judgment process can actually cause the inferior quality it is designed to detect. However, there is a positive aspect to the anxiety that writing assessment causes. It does bring the problem to the attention of the student and counselors and thus may serve as a catalyst in the student's quest for education.

Unfortunately, the constraints of time and money make it difficult to alleviate the conditions that foster test anxiety. If the fear factor causes students to do poorly on the writing assessment, then they must decide, usually with the help of counselors, whether the poor performance is likely to be repeated in freshman composition. If so, then students are better served by taking the recommended pre-baccalaureate course or courses. Practice at taking essay tests under timed conditions seems to help most students overcome their fear and enhance their performance, and workshops are offered in such practice. In severe cases that do not seem to improve with practice,

however, at-risk students may simply drop out of school from frustration and despair. These students are harmed or hampered not so much by the assessment process but by their own inabilities to overcome anxiety or a problem with written expression. Peter Elbow's argument against a single heavily-weighted, timed impromptu essay exam would seem to be relevant for these high apprehensives.

Pre-baccalaureate Support

Too Costly

The third viewpoint looks at the costs of pre-baccalaureate-level course work. The monetary complaints of influential politicians and legislators and even some educators about the financial drain such activities put on the universities are significant. To illustrate these concerns, a report from the CSU Trustee Committee on Educational Policy dated July 18-19, 1995, under Agenda Item 2, states: "These institutions are finding it increasingly difficult to justify spending limited resources to teach students precollegiate skills." The plan proposed in this report would severely limit the

opportunities for at-risk special-admit students. It reads as follows:

> Resolved, By the Board of Trustees of the California State University that a series of goals be established for steadily reducing the need for remediation in the CSU:
>
> *Prior to fall 2001 key implementation components (e.g., standards, assessment, early intervention), will be in place leading to the expectation that by fall 2001 there will be a 10 percentage point decline in the number of regularly admitted new freshmen needing remediation.
>
> *By fall 2004 the number of regularly admitted new CSU freshmen needing remediation will have been reduced to one-half of present levels.
>
> *By fall 2007 the number of regularly admitted new CSU freshmen needing remediation will have been reduced to 10 percent of that group...

The adopted but not yet implemented plan limits students requiring remediation to 10% of the present levels by 2007. The committee does not seek to abolish the assessment and placement process, however, but to significantly modify its function at all of the California State University campuses. The modification takes the form of "counseling" the students to seek preparatory help for postsecondary readiness elsewhere, such as community college. The role of assessment in implementing such a strategy is a crucial one, for without mandatory assessment the plan could not be implemented. Currently, writing placement assessment occurs after students have been accepted to the university. However, if the students are counseled to go elsewhere after acceptance, this advice may send a powerfully negative message, thus enacting the gatekeeper function of writing assessment in earnest.

Any shift in function from placement to exclusion is significant because those students most in need of the socioeconomic boost a college education can offer may face increasingly limited access to the university. True, there are some exceptions to this phased-in exclusionary

process. For example, ESL students with fewer than five years of residency in the United States will still be admitted to the university.

The status of those at-risk, minority and marginalized students is in question, however, particularly since the repeal of affirmative action here in California. To understand the significance of this shift in attitude, we must first understand the conditions that led to open admissions, or much more open admissions, in the university systems. Mina Shaughnessy speaks of the events leading to open enrollments and the confusion at the universities that resulted:

> Toward the end of the sixties and largely in response to the protests of that decade, many four-year colleges began admitting students who were not by traditional standards ready for college. The numbers of such students varied from college to college as did the commitment to the task of teaching them. In some, the numbers were token; in others, where comprehensive policies of admissions were adopted, the number threatened to "tip" freshman classes in favor of

> the less prepared students. For such colleges, this venture into mass education usually began abruptly, amidst the misgivings of administrators, who had to guess in the dark about the sorts of programs they ought to plan for the students they had never met, and the reluctancies of teachers, some of whom had already decided that the new students were ineducable. (1)

Success of the students taking advantage of these programs kept the concept of open enrollments alive as a vital element of our mid-century cultural evolution.

Benefits to At-Risk Students

The fourth viewpoint holds that assessment, placement and subsequent course work are intended only for the continued benefit of students by matching them with challenging but manageable classes. Edward M. White is promoting this student success by looking at current implementation of the test. He sees the universal writing assessment as a tool enabling students to succeed, rather

than as another hurdle for students to jump. A strong characteristic of that success is the correct placement of students in a writing course that meets their needs and fosters growth of their writing skills. White says, "The typical college placement test, for example, seeks information that will help students enroll in courses for which they are ready, so they have a reasonable chance to succeed" ("Apologia" 33). White answers questions about this perceived information gap in a direct and databased response. In the abstract preceding his essay he states, "As the data show, the effect of a placement program, followed by a careful instructional program, is to allow many students who would otherwise leave school to continue successfully in the university" ("Importance" 75). The writing assessment, then, could be used as a helpful tool for students, ensuring that the courses they take will prove beneficial and that the students themselves can succeed and go on to more challenging courses in pursuit of their academic goals.

Of course, there are other factors that have an impact on the process, such as the interests of faculty, administrators, legislators, and the public, but in its

simplest sense, writing assessment in White's view has an intended benefit to students--ultimately it is supposed to enhance students' success and continued pursuit of their educational goals.

Data Supports English Placement Test

In reviewing the published literature, there is little consensus about the effects of the EPT on at-risk students. However, there are some published studies whose data would seem to support it and other instruments like it. The last of five studies prepared by the Division of Institutional Research of the CSU Chancellor's Office is dated March 1981; it presents data compiled two-and-a-half years after the study population of fall 1978 freshmen entered the multi-campus system. The report notes:

> [T]hat marked differences in continuation exist among groups of students depending upon their participation in the testing program and their resultant test performance. [As Table I shows], of those who did not take the English Placement Test (EPT), despite much urging, only 78.7

> percent remained in school the following Spring; the basic writing group, those scoring at or below 150, continued at a 90.0 percent rate. When the data are compiled in spring 1981, two-and-a-half years later, this difference increases: EPT non-participants continue at only 37.8 percent, while 51.8 percent of the basic writing group is still at the university. The continuation difference between the basic writing group and those scoring above 150 is much smaller. ("Importance" 78-79)

What is most interesting about the above statistical summation is the 14.0 percent difference between the test taking and the non-test-taking group after two-and-a-half years. Given this significant difference in student continuation, it is small wonder that the EPT is a requirement (with few exceptions) for all entering freshmen.

Although these studies were not specifically connected to at-risk special-admit students, they do not specifically exclude these students and thus may be considered valid with regards to the help or harm issue.

White reports that students seem to benefit from assessment and the skill building classes they take as a result by remaining enrolled in the university for longer periods of time ("Importance" 82). Another very interesting observation from White's essay on freshman composition assessment data shows that students who voluntarily opted to take skill-building courses persisted in their college studies in greater numbers than those who did not.

White offers alternative explanations for the correlation between assessment and correct placement for this result, but these alternatives do not seem to take the place of a cause and effect relationship between the exam and subsequent results:

> There are several ways to interpret these data. We could hypothesize that students who do not participate in the placement program are less motivated and hence more likely to drop out of school than those who do participate. There are, of course, many reasons for students to leave school besides inadequate writing ability. Nonetheless, it is striking that the basic

> writing students, those with low EPT scores and hence weak preparation for college writing, continue at only a 6 percent lower rate than the high-scoring group and at 2.7 percent above the average of all students. ("Importance" 79)

These placement test results are significant. Why, given the relevance of this data in support of assessment testing, are such studies not an ongoing effort by the Chancellor's Office? Perhaps the results of the study produced the necessary effect in promoting the desirability of mandatory EPT testing, and perhaps the Chancellor's Office concluded that the time and expense of redesigning and continuing the study was unnecessary.

Despite the potential benefits to students, they often complain about having to take assessment tests or about being assessed below their abilities. The two specific California and New Jersey studies cited earlier, as well as the study detailed in this text, should dispel any charges of a lack of information. These studies clearly show that students who elect the assessment process and, if necessary, subsequently take classes to bring up their writing skills, stay in college in greater

numbers than those who are assessed as needing the classes but do not take them. These studies also show that students who score above the minimum requirement seem to gain additional benefit from pre-baccalaureate writing courses as well.

Although there is sketchy information on at-risk students in particular, it seems logical that they, too, would benefit from correct assessment and placement. White supports this idea very strongly in a 1995 essay: "The argument that our programs do not work is baseless, as the California and New Jersey data show; given adequate support, we can help most low-scoring students succeed" ("Importance" 83). The key, it seems, is adequate support in the form of pre-baccalaureate courses and tutoring facilities and facilitators (tutors).

CHAPTER THREE

DATA ANALYSIS AT CALIFORNIA STATE UNIVERSITY SAN BERNARDINO 1990-1998

One Class

This original study was devised to overcome the problems with evaluating the efficacy of assessment, placement and pre-baccalaureate writing courses. As noted earlier, there is no ongoing study of writing programs to determine their long-term impact. After thinking about this problem at length, I realized that I could design a study to answer questions about the behavior of students who had completed specific elements of the writing program at CSUSB. The program I visualized would also be generic enough to be modified for use by other departments that might want to study their pre-baccalaureate-level programs as well. I had completed three programming classes (Basic, Pascal and C) and knew enough about the process to write the basic algorithm and set up the parameters for the study. I also knew that I could enlist the expertise of my analyst/programmer husband, Lawrence (who works for

Compaq Computer Corporation) to write the specific program to work with the software already in place here at CSUSB.

After checking with Dr. Edward M. White and Dr. Robert A. Schwabe, I determined the main hurdles of strict student anonymity and varied data format could be overcome and the project implemented. What I hadn't factored in was the time delay in getting the program written in Visual Basic and in getting the data analyzed. My programmer husband was often working two and three projects for Compaq simultaneously and my project had to be squeezed in during his off hours at home. However, the project is now a success, the program does work as documented, the results are encouraging, and if approved, this custom-made software program will be made available to Dr. Schwabe on diskette and compact disc for use by the university for further studies.

I wanted to study a student population year of sufficient age to show long-term results that could be measured and quantified. Unfortunately, the data for the population year chosen, 1990-1991, existed in two or three different locations and an equal number of formats. Fortunately, Dr. Schwabe's staff member, Ross Moran,

managed a minor miracle by consolidating the data on diskettes in a format the programmer could read and download.

The state-mandated requirement for strict anonymity of the subject students was handled quite easily because the data studied was devoid of any identifying information such as names, social security numbers, ethnicities or genders.

The student population analyzed for the study consisted of incoming students for the 1990-1991 school year who took the California State University English Placement Test (EPT). The study analyzed data from the fall quarter of 1990 through spring quarter of 1998. The final analysis shows totals for the entire period (seven full years plus two quarters). Two distinct groups within this population were tracked according to whether or not they took the pre-baccalaureate English classes prior to enrolling in English 101 (Freshman Composition). A number of factors were studied: the first quarter attended, last quarter attended, total number of units earned, the number of attempts in pre-baccalaureate English classes (English 095 and 085), the grades achieved in pre-baccalaureate

classes, the cumulative grade point average achieved, the grade achieved in English 101, the number of attempts at English 101, and the number and type of degrees awarded.

The study was conducted to determine the impact of the English Placement Test specifically on at-risk students, that is, those who place into the Developmental English categories. However, comparisons can be made between those students who took pre-baccalaureate courses prior to taking English 101 and those who did not. The data not only reveal information about the at-risk student population, but also about those not considered to be at risk.

One frustrating factor discovered was that of attrition. That is, once having taken the assessment test and placed at an appropriate level, many students chose not to enroll for the fall quarter of 1990. What happened to these students is unknown. Did they enroll instead at a community college to take the coursework they needed? Did they subsequently transfer to another four-year university? Did they give up on college entirely? These questions cannot be answered from the data provided. The information on students lost to attrition is a key issue

because the potential exists for either help or harm to students' academic pursuits. Students interrupt their academic pursuits for many reasons. Perhaps further study could determine the information, but the mandate for anonymity remains problematic from a research standpoint. Certainly, with the computer program in place, the data could be extracted over an extended period of time and "lost" students could be "found" if they returned to the university within an extended time period. The data need only show a cumulative total of students who chose not to enroll during the initial study period but who later enrolled during the extended study period.

In the interest of clarity, all graphs, charts, statistical readouts, spreadsheet, and the computer program itself are included in appendices.

The results of the study show that the pre-baccalaureate courses for English here at CSUSB do help at-risk students pass English 101. Seventy-two percent of at-risk students who failed the EPT and took pre-baccalaureate English courses passed English 101 with a grade of "C" or better. However, only thirty-two percent of at-risk students who failed the EPT and did not take

the pre-baccalaureate courses before attempting English 101 passed English 101 with a grade of "C" or better. Thus, the at-risk students who took pre-baccalaureate courses were able to successfully pass English 101 at a ratio of 2.25:1 over those at-risk students who did not take pre-baccalaureate course work, or two and one-quarter times greater. The pass rate of seventy-two percent of pre-baccalaureate course participants compares favorably with the eighty-three percent pass rate for non at-risk students who passed the EPT and took English 101 directly. Thus, the assessment-placement-course work process seems to benefit at-risk students. The results are significant because the students who take the recommended course work achieve at a rate almost as high as those placing directly into English 101.

Of 612 students who took the EPT, 275 students (approximately forty-five percent), passed and were placed directly into English 101. Of the remaining 337 students (considered at-risk), 253 at-risk students (approximately forty-one percent) elected to take the pre-baccalaureate courses before attempting English 101, while only 84 at-

risk students, (the remaining approximately fourteen percent), elected not to take pre-baccalaureate courses.

The percentage of at-risk students earning baccalaureate degrees also compares favorably with those of non at-risk students when pre-baccalaureate English courses are taken. Thirty-nine percent of non at-risk students earned degrees compared to thirty-seven percent of at-risk students who took pre-baccalaureate courses. Students not considered at-risk earned 102 baccalaureate degrees, two master's degrees and three certificates as of the 1998 spring quarter. At-risk students who took the pre-baccalaureate English courses earned 91 baccalaureate degrees, one master's degree and one certificate. In contrast, only eighteen percent of at-risk students earned degrees when pre-baccalaureate English courses were not taken. Students considered at-risk and not taking the pre-baccalaureate English courses earned only 15 baccalaureate degrees, no master's degrees and no certificates. Thus, it seems clear that at-risk students, who at present come primarily from minority populations (Carter A5), are helped by the process of assessment-placement- and pre-baccalaureate course work. If the

emphasis in postsecondary education is to remain on equal opportunity for minority students, then clearly the current process should remain in place.

Cumulative grade point averages covering the entire study period also reflected a positive correlation to participation in pre-baccalaureate courses. Students who initially passed the EPT (non at-risk) showed a group cumulative grade point average of 2.50 at the end of spring quarter 1998. Students considered at-risk but taking pre-baccalaureate courses showed a group cumulative grade point average of 2.20. However, students considered at-risk but not taking pre-baccalaureate courses showed a group cumulative grade point average of only 1.99 for the time period studied.

The results of this study show a positive correlation between the assessment-placement-pre-baccalaureate course process and enhanced retention and achievement as measured by grade point average and degrees/certificates earned. (For a visual illustration of these results, see the attached data printout, graphs, spreadsheet, and computer program.) These results, however, are just a small sample of what should be studied at CSUSB to obtain a more

complete picture of what is taking place with students in the English writing program. Further studies are needed to answer questions about what is happening with more current student populations to see if these results are a consistent part of the whole picture. Fortunately, with the software program in place, future longitudinal studies should easily be obtainable.

CHAPTER FOUR

CONCLUSIONS AND RECOMMENDATIONS

Looking Forward

The literature review shows the experts to be at odds over the issue of whether the EPT helps or harms at-risk students. However, my data and that discussed by White show that, if appropriately used, the EPT has more positive than negative effects. No empirical evidence was found that the EPT was harmful to at-risk students at the university level, although a 1991 study involving community college students sounds a cautionary note about possible effects on students of color. My original study of CSUSB students indicates that for this campus and for the incoming freshman year studied (1990-1991) students scoring below the required level for freshman English were helped by the process if they chose to follow the recommended courses. The most important recommendation for CSUSB at this time would be to undertake additional data studies using the attached software program.

The current literature on the EPT, the available data studies on assessment and placement of students, and my

original data analysis for this campus point to the conclusion that the majority of students do benefit from writing assessment and placement in an appropriate composition course. The information is very limited about how at-risk students are specifically affected by the testing process because educators and researchers do not seem to have directly addressed this question. As a result, the effects on the general student populations that have been studied have been extrapolated to include those at-risk. Elbow brings important concerns to light, but the evidence presented by White and others effectively counters his arguments. In looking at the exceptions, that is, students who are harmed by the system, it is important to note that, at present, they <u>are</u> exceptions and that the majority of students are assessed and placed into appropriate classes. Thus, predominately positive numbers would seem to make a strong argument for assessment to continue.

However, as White points out in his essay on the effectiveness of writing placement assessment and subsequent writing courses for students, the key to effectiveness is "adequate support." This support was

slated for removal and was to be 90% eliminated by the year 2007 in the California State University system. However, the new state administration may change that mandate. Right now, students are finding the current system, which uses writing assessment as a placement tool, more helpful than harmful.

While there seems to be no absolute answer about whether writing assessment alone helps or harms students, it is possible to say something about the uses that the results are put to by faculty and administrators in positions of power. As long as the tests are administered in good faith and programs designed to help students achieve their educational goals are in place, writing assessment can be a helpful tool for placement of regular and at-risk students. If these tests are used to exclude and marginalize, however, they will constitute an abuse of power through racial and socioeconomic discrimination and a gross breach of faith by those in academic authority.

One positive action that can be undertaken by CSUSB is to use the software in place to study longitudinally the student populations subsequent to the 1990-1991 academic year. If the data accumulated continue to show a

positive correlation between pre-baccalaureate writing courses and at-risk student achievement, they should help secure support for the pre-baccalaureate writing program. The compelling proof of greater academic success for at-risk students taking these courses would be very hard to deny. Additionally, it might be helpful to identify the effects of the EPT on different ethnic and socioeconomic groups to determine whether there is a problem with inherent bias. The 1991 community college study of the assessment/placement process noted discrepancies in the California Community College system in performance of ethnic populations when using a placement test last validated in 1979. Use of an outdated test causes concern for Joan Jones and Ronald Jackson in a 1991 study. Their work indicates that:

> [T]he test does disproportionately impact the various ethnic groups provided the expectation is that below college-level scores should be equally dispersed among the ethnic groups. (10)

Student confidentiality issues placed information on ethnicity beyond the scope of my study; therefore,

exploration of this aspect of the EPT at CSUSB must be left for other researchers.

The issues surrounding the subject of at-risk college students are complex and encompass students, parents, teachers, administrators, communities, and employers. The problem has three primary components: identifying and supporting students who need basic writing and test-taking skills in the K–12 environment, providing additional venues for opportunities to enhance proficiency in these skills in the postsecondary environment, and motivating students to learn to read and write effectively. Because these issues are so complex and sensitive, it is imperative that the university system acts cooperatively and compassionately rather than adversarily when working to improve student preparedness, particularly in the K–12 academic environment.

Better communication of what students need for college preparation is one strategy advocated by the Board of Trustees. The Board states its objectives in the Executive Summary of the July 1995 committee meeting:

> Supporting Basic Skills Acquisition in K-12

A. The CSU will provide leadership to achieve consensus on necessary skill levels and methods of assessing the English and mathematics competencies of high school graduates.

B. The CSU will take steps to ensure that teacher education programs prepare teachers effectively to teach basic skills.

C. The CSU will disseminate information on CSU's standards, seek support for additional K-12 skills programs, and expand the number of CSU students helping high school students acquire basic skills. (1)

Despite the official commitment from the CSU, however, some high school English teachers are skeptical of this tutorial approach and perceive no possibility of change in student achievement without support of a more tangible nature.

On April 12, 1997, I attended the English Studies Conference for the CSU system held on the Los Angeles campus. Following my presentation of an abbreviated version of this thesis, one of my fellow graduate students, an 18-year English-teaching veteran of the

secondary schools, asked if there was any evidence of substantial help coming from the postsecondary institutions or their governing bodies. I explained that there is a start-up program, with limited funding, to place college undergraduates as tutors in the secondary schools. However, because tutorial focus works best in a one-on-one format and next best within small groups of 4 or 5 for each tutor, the number of tutors needed to address the problem of under prepared students is staggering. Several onlookers, most of them graduate students and their advisors, expressed great skepticism about the chances for success of this tutorial program.

Nevertheless, every attempt must be made to enhance learning opportunities in the elementary and secondary schools including tutorial help from many quarters. Cooperative support is one avenue to explore in helping to lessen under-preparedness in graduating secondary school students. Voluntary student peer tutoring could be modified and added as a community service requirement to the baccalaureate program.

Collectively, a variety of venues offering access to writing courses should be promoted and maintained,

including post-secondary ones in both the public and private sectors. For example, Regional Occupational Program (ROP) courses could be expanded or added to help at-risk students learn to write (and read) more effectively. Potential university students might be encouraged through public service announcements to explore online (Internet) help with their writing and reading.

The California community colleges, a traditional venue for at-risk students, are already feeling the pressure of increased enrollments and limited funding to handle the increase. Unfortunately, Governor Davis has further cut general fund spending to the community colleges ("Community") and no plan has been made to fund the community colleges for the additional courses necessary to accommodate these students. Nor has there been any additional funding allocated to the secondary schools to hire additional teachers, build additional classrooms and thus lower class sizes for more intensive and focused teaching and learning of composition skills.

The third component of the problem of under-prepared students, motivation, is much more problematic to solve than either identifying students or increasing their

access to helpful programs. Throughout this thesis, I have operated on the assumption that the at-risk students under discussion are motivated to pursue goals of higher education for the betterment of their own lives and for the lives of those who are dependent upon them. If students are not motivated to achieve a higher education, then the effort expended by teachers, businesses, or the wider community will be ineffective. However, if students are motivated to earn a higher education, then the help and support provided by all those dedicated to helping and teaching these students will be a productive and rewarding investment. More research needs to be done on motivation of at-risk students, but it is beyond the scope of this thesis to address this issue.

There is no one "magic pill" that will solve the problem of under-prepared, at-risk students and their loss of easy and straightforward accessibility to our state university systems.

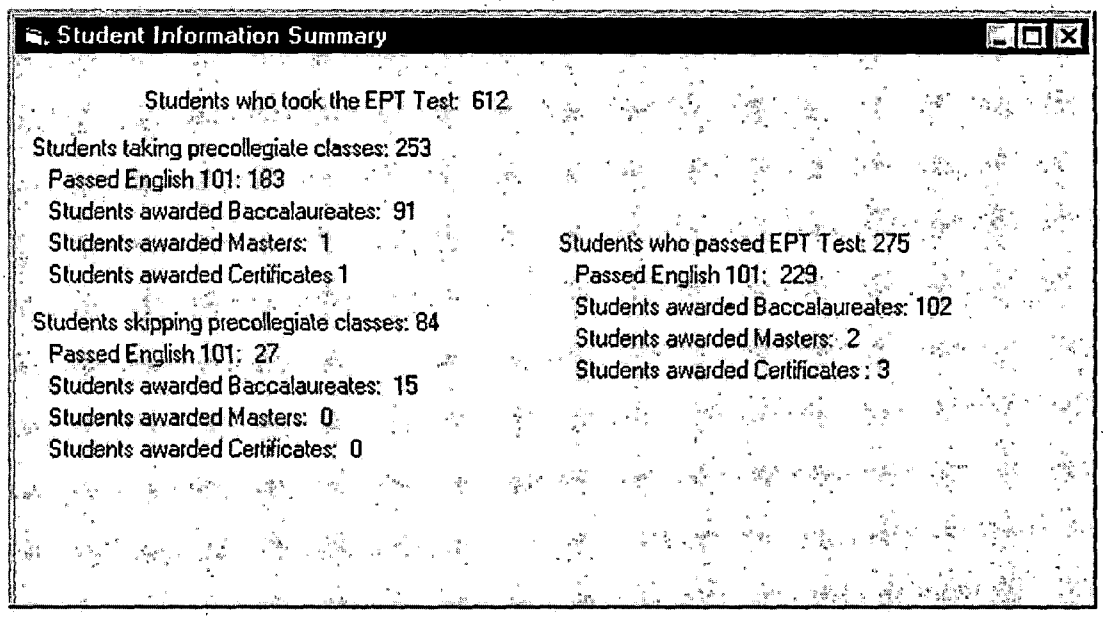
Historically, our nation seems capable of uniting only in times of physical crises, not intellectual disaster. When lack of educational opportunity or emphasis is perceived to pose a physical threat to the

country such as occurred during the 1950s "Sputnik" challenge, changes in curriculum and access to higher education are implemented.

If the ambitious goal of helping all students, including at-risk students, achieve their full potential and reach their higher-education goals is to be reached, then everyone must do his or her part--teachers, businesses, the wider community of voters, parents, and of course, the students themselves. We should not wait until we suffer economically on a national scale before we rally to solve this widespread problem. We should not deny many of our students access to the realization of their full potential until an inadequately trained workforce undoes us. This loss of potential is too great, not only in economic terms, but most tragic of all, in human terms.

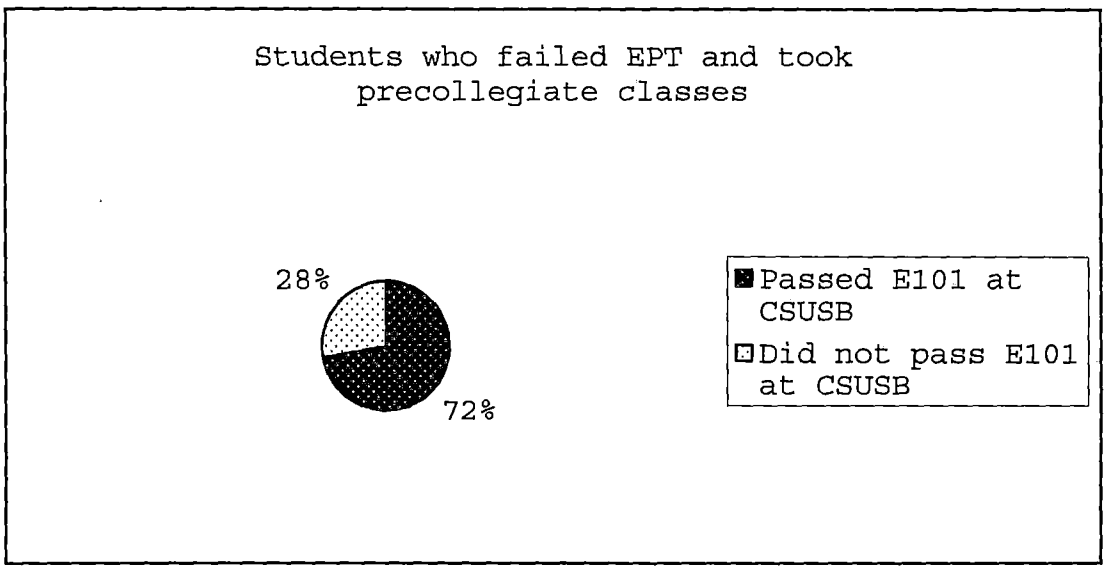
APPENDIX A

STUDENT INFORMATION SUMMARY

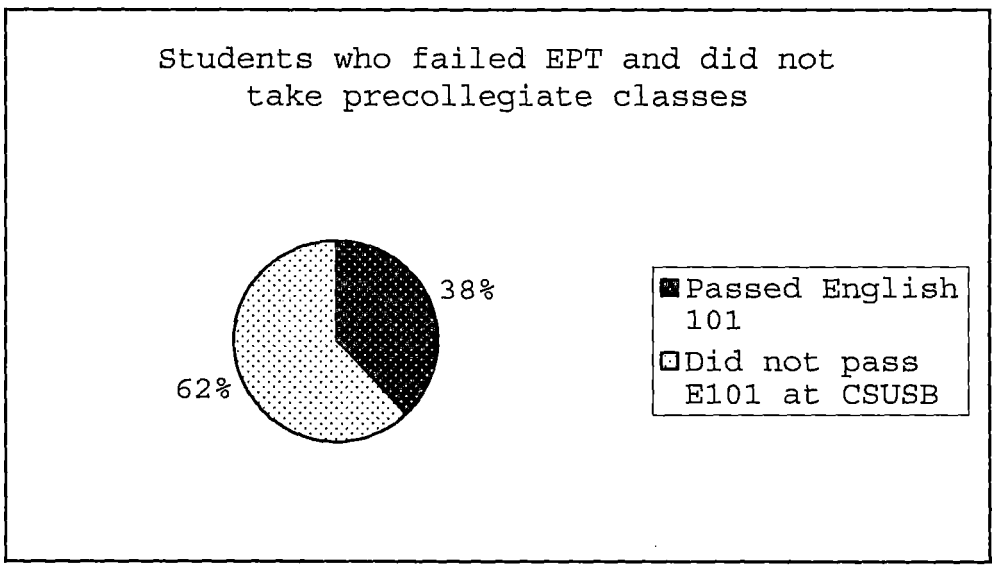

Student Information Summary
Students who took the EPT Test: 612
Students taking precollegiate classes: 253
Passed English 101: 183
Students awarded Baccalaureates: 91
Students awarded Masters: 1
Students awarded Certificates 1
Students skipping precollegiate classes: 84
Passed English 101: 27
Students awarded Baccalaureates: 15
Students awarded Masters: 0
Students awarded Certificates: 0
Students who passed EPT Test: 275
Passed English 101: 229
Students awarded Baccalaureates: 102
Students awarded Masters: 2
Students awarded Certificates : 3

APPENDIX B

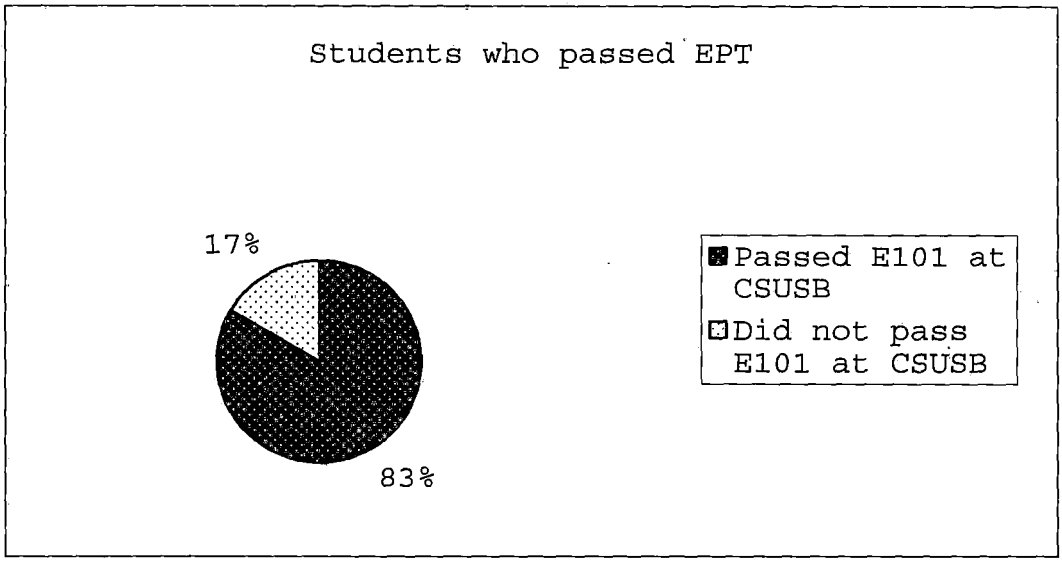
GRAPHS



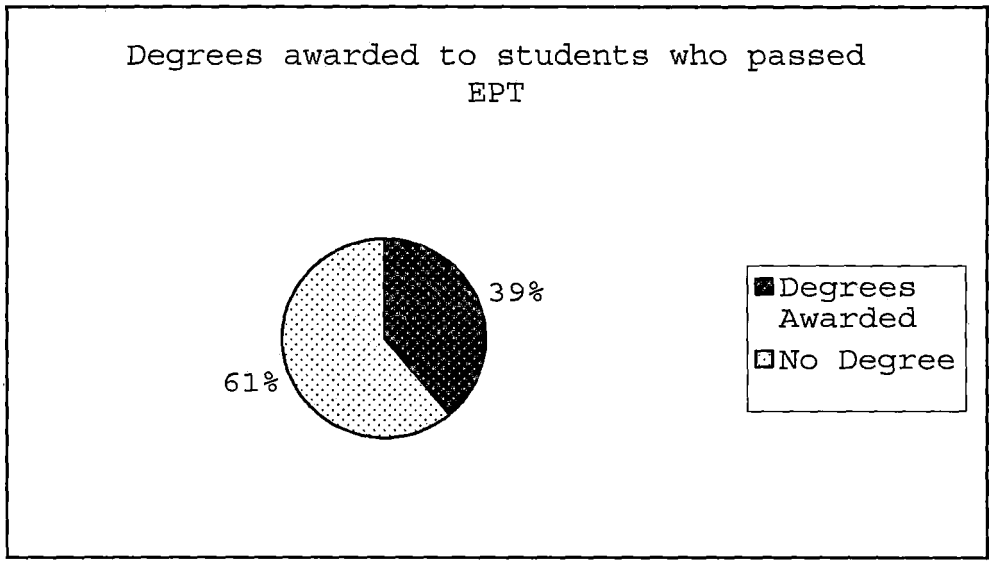
Graph #1



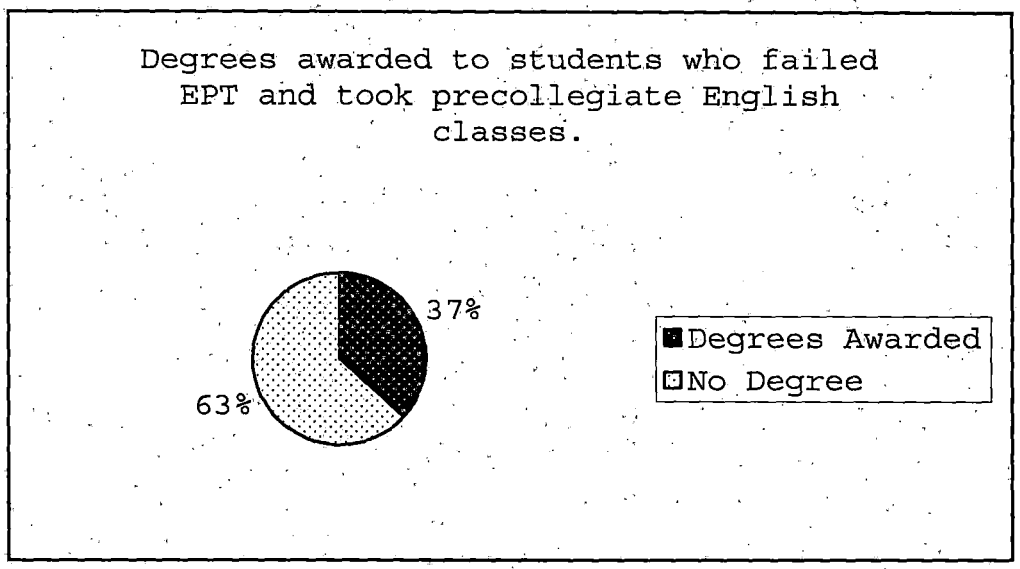
Graph #2



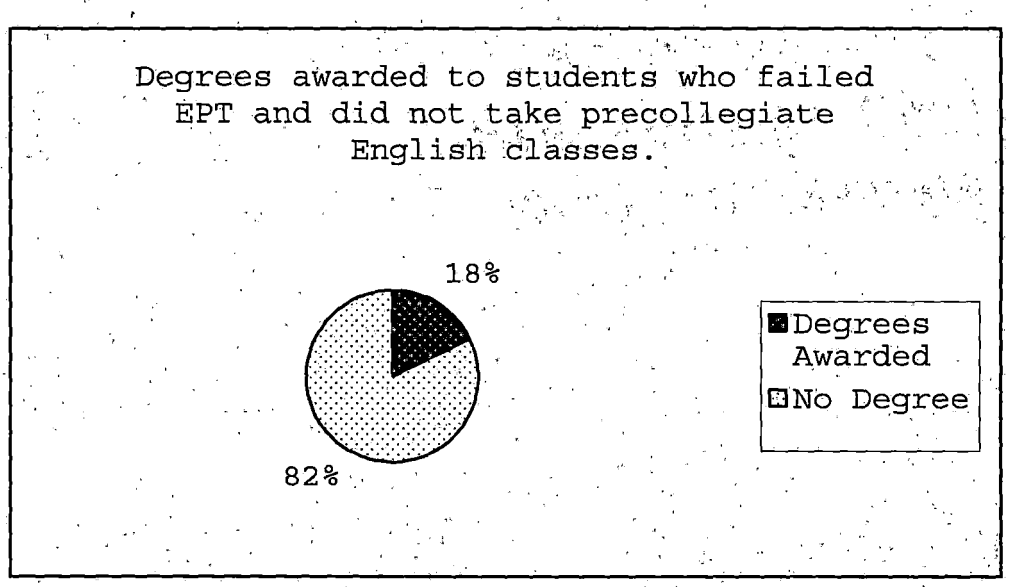
Graph #3



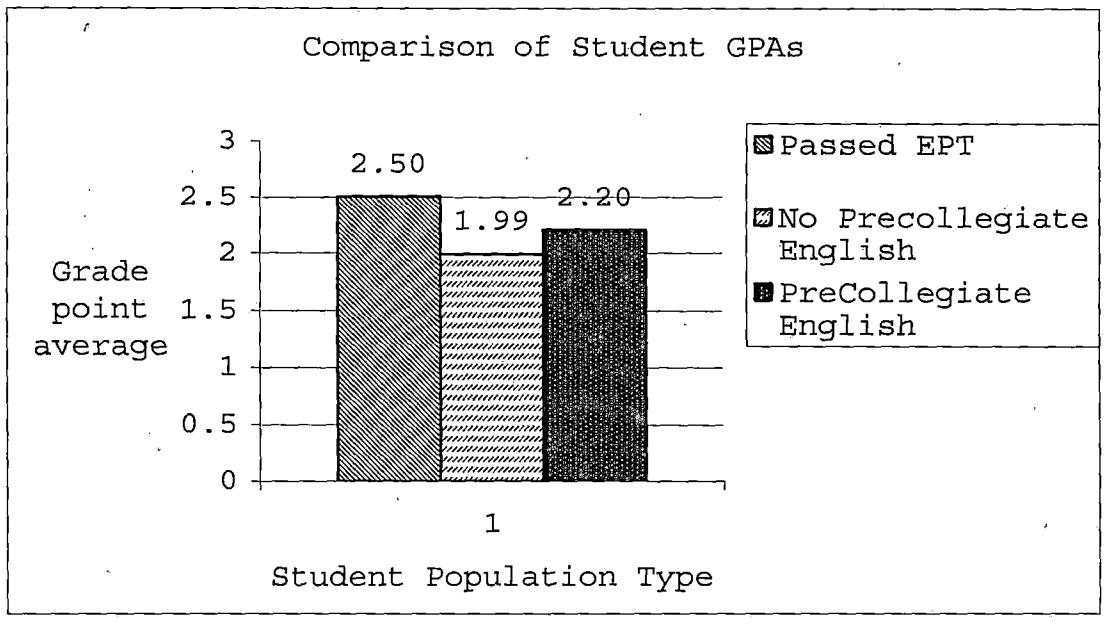
Graph #4



Graph #5



Graph #6


Comparison of Student GPAs
Grade point average
3
2.5
2
1.5
1
0.5
0
2.50
1.99
2.20
1
Student Population Type
Passed EPT
No Precollegiate English
PreCollegiate English

Graph #7

APPENDIX C

SPREADSHEET

Student Number	Ending Quarter	GPA	Units attempted	Units Awarded	WPA Score	WPA Passed	Eng085 Grade	Eng085 Attempts	Eng095 Grade	Eng095 Attempts	Pre101 Grade	Pre101 Attempts	Eng101 Grade	Eng101 Attempts	Degrees Awarded
541	1996 Q2	2.919	215	221	150	FALSE		0		0		0	A-	1	1
342	1998 Q3	2.745	61	73	150	FALSE		0		0		0	A	1	0
282	1998 Q4	2.409	134	124	145	FALSE		0		0		0	B-	1	0
587	1992 Q2	1.45	51	41	150	FALSE		0		0		0	B-	2	0
545	1993 Q2	3.071	128	130	150	FALSE		0		0		0	B-	1	0
183	1996 Q3	3.385	163	172	150	FALSE		0		0		0	B-	1	0
555	1994 Q4	3.28	200	206	150	FALSE		0		0		0	B	1	1
41	1994 Q4	2.753	186	194	150	FALSE		0		0		0	B	1	1
182	1995 Q4	2.701	188	186	150	FALSE		0		0		0	B	1	1
250	1997 Q4	2.437	193	186	150	FALSE		0		0		0	B	1	1
79	1991 Q2	1.875	32	24	150	FALSE		0		0		0	B	2	0
85	1991 Q2	3.49	42	42	150	FALSE		0		0		0	B	1	0
25	1996 Q2	2.494	199	189	150	FALSE		0		0		0	B	1	1
115	1997 Q1	3.752	38	56	150	FALSE		0		0		0	B	1	1
133	1994 Q4	2.882	175	188	150	FALSE		0		0		0	B+	1	1
527	1992 Q2	2.119	71	67	150	FALSE		0		0		0	B+	1	0
119	1996 Q2	3.538	213	219	150	FALSE		0		0		0	B+	1	1
479	1996 Q2	3.961	36	74	150	FALSE		0		0		0	B+	1	1
503	1996 Q1	3.527	177	188	150	FALSE		0		0		0	B+	1	2
123	1996 Q1	1.776	97	91	150	FALSE		0		0		0	B+	1	0
167	1992 Q4	1.6	56	56	148	FALSE		0		0		0	C	1	0
327	1998 Q2	2.711	202	190	150	FALSE		0		0		0	C	1	0
40	1991 Q1	1.9	12	14	150	FALSE		0		0		0	C	1	0
316	1997 Q4	1.878	184	166	150	FALSE		0		0		0	C+	1	0
418	1992 Q2	1.846	30	22	150	FALSE		0		0		0	C+	2	0
473	1995 Q2	2.296	186	188	150	FALSE		0		0		0	C+	1	1
531	1996 Q2	2.1	178	186	150	FALSE		0		0		0	C+	2	1
75	1991 Q2	0.428	21	3	150	FALSE		0		0		0	NC	2	0
90	1991 Q2	1.108	25	17	150	FALSE		0		0		0	NC	1	0
281	1991 Q2	0	0	0	150	FALSE		0		0		0	NC	1	0
483	1991 Q2	2.371	28	30	150	FALSE		0		0		0	NC	1	0
540	1991 Q2	0.666	24	8	150	FALSE		0		0		0	NC	1	0
308	1991 Q1	0.175	16	4	150	FALSE		0		0		0	NC	1	0
48	1990 Q4	1	12	8	145	FALSE		0		0		0		0	0
54	1990 Q4	2.2	19	15	128	FALSE		0		0		0		0	0
225	1990 Q4	0	0	0	142	FALSE		0		0		0		0	0
263	1990 Q4	0	0	0	143	FALSE		0		0		0		0	0
309	1990 Q4	1.233	12	8	148	FALSE		0		0		0		0	0
331	1990 Q4	0	0	0	137	FALSE		0		0		0		0	0
394	1990 Q4	1.5	8	4	145	FALSE		0		0		0		0	0
454	1990 Q4	0	0	0	146	FALSE		0		0		0		0	0
472	1990 Q4	0	0	0	149	FALSE		0		0		0		0	0
481	1990 Q4	0.47	17	8	145	FALSE		0		0		0		0	0
594	1990 Q4	0.85	8	4	143	FALSE		0		0		0		0	0
62	1991 Q4	3	4	4	147	FALSE		0		0		0		0	0

448	1991 Q4	3.48	20	20	149	FALSE	
535	1991 Q4	0	0	0	144	FALSE	
200	1994 Q4	3.94	30	30	146	FALSE	
439	1994 Q4	1.6	25	16	130	FALSE	
543	1995 Q4	1.176	60	40	145	FALSE	
312	1996 Q4	3.764	34	34	150	FALSE	
233	1997 Q4	2.346	171	186	146	FALSE	
59	1998 Q4	2.521	140	130	148	FALSE	
274	1998 Q4	3.069	121	114	147	FALSE	
38	1991 Q2	3.35	8	8	150	FALSE	
92	1991 Q2	2.689	19	19	146	FALSE	
164	1991 Q2	1.302	34	26	140	FALSE	
202	1991 Q2	1.476	13	15	137	FALSE	
236	1991 Q2	2.124	25	23	137	FALSE	
279	1991 Q2	1.911	36	26	147	FALSE	
421	1991 Q2	2.242	28	28	149	FALSE	
560	1991 Q2	0.375	32	8	142	FALSE	
600	1991 Q2	0.5	8	4	144	FALSE	
211	1992 Q2	1.35	42	29	149	FALSE	
485	1992 Q2	2.795	81	81	149	FALSE	
601	1996 Q2	2.79	194	187	124	FALSE	
406	1997 Q2	2.841	110	92	145	FALSE	
253	1998 Q2	1.835	39	26	148	FALSE	
4	1991 Q3	3.401	61	61	139	FALSE	
524	1995 Q3	2.494	17	17	142	FALSE	
549	1996 Q3	1.526	41	30	139	FALSE	
8	1991 Q1	2.984	26	26	134	FALSE	
96	1991 Q1	2.666	12	21	141	FALSE	
129	1991 Q1	0.425	16	4	139	FALSE	
188	1991 Q1	0.35	8	4	139	FALSE	
209	1991 Q1	0.883	24	12	135	FALSE	
234	1991 Q1	3.85	8	8	147	FALSE	
241	1991 Q1	0	0	0	128	FALSE	
353	1991 Q1	0.7	4	4	134	FALSE	
412	1991 Q1	2.333	12	14	143	FALSE	
429	1991 Q1	1.866	12	12	149	FALSE	
522	1991 Q1	2.533	12	12	139	FALSE	
121	1995 Q1	3.103	96	109	149	FALSE	
313	1998 Q1	2.566	190	190	146	FALSE	
607	1992 Q4	1.979	83	87	139	FALSE	CR
108	1995 Q4	2.127	100	100	143	FALSE	
148	1998 Q4	3.04	40	42	137	FALSE	CR
514	1991 Q2	1.944	27	27	142	FALSE	
506	1992 Q2	3.548	82	92	144	FALSE	
590	1992 Q2	2.336	72	76	140	FALSE	CR
184	1994 Q2	1.742	94	84	146	FALSE	
544	1994 Q2	3.491	180	188	144	FALSE	
190	1996 Q2	3.662	32	32	147	FALSE	

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0	0	0	0	0

212	1996 Q2	3.433	12	12	132	FALSE	CR	1	0 CR	1 A-	1	1
534	1997 Q2	3.705	34	52	146	FALSE		0 B	1 B	1 A-	1	1
376	1994 Q1	2.424	112	110	145	FALSE		0 A	1 A	1 A-	1	0
579	1997 Q1	2.978	204	216	146	FALSE		0 A-	1 A-	1 A-	1	2
493	1997 Q1	2.687	209	209	149	FALSE		0 B+	1 B+	1 A-	1	1
516	1995 Q4	3.43	233	241	135	FALSE	CR	1	0 CR	1 A	1	1
553	1995 Q2	2.525	205	193	149	FALSE		0 A-	1 A-	1 A	1	0
572	1995 Q2	3.153	185	188	148	FALSE		0 B+	1 B+	1 A	1	1
592	1994 Q3	3.592	194	198	143	FALSE		0 B-	1 B-	1 A	1	1
16	1997 Q1	3.382	184	188	146	FALSE		0 B	1 B	1 A	1	1
340	1997 Q1	3.7	44	48	143	FALSE		0 A	1 A	1 A	1	2
45	1992 Q4	2.347	91	89	143	FALSE		0 B	1 B	1 B-	1	0
226	1992 Q4	1.398	63	49	143	FALSE		0 B-	1 B-	1 B-	1	0
511	1992 Q4	2.011	36	28	144	FALSE		0 B-	1 B-	1 B-	1	0
398	1994 Q4	3.143	192	194	144	FALSE		0 B	1 B	1 B-	1	1
480	1995 Q4	2.356	193	188	137	FALSE	CR	1	0 CR	1 B-	1	1
205	1996 Q4	3	8	8	146	FALSE		0 B	1 B	1 B-	1	1
584	1997 Q4	3.155	54	86	142	FALSE		0 B+	1 B+	1 B-	1	1
145	1991 Q2	2.635	28	30	144	FALSE		0 B	1 B	1 B-	1	0
360	1991 Q2	2.333	24	26	142	FALSE		0 B-	1 B-	1 B-	1	0
151	1993 Q2	2.808	107	109	141	FALSE	CR	1	0 CR	1 B-	1	0
388	1994 Q2	2.355	176	188	147	FALSE		0 B	1 B	1 B-	1	1
51	1996 Q2	2.453	224	219	147	FALSE		0 B	1 B	1 B-	1	1
377	1996 Q2	3.882	34	52	137	FALSE	CR	1	0 CR	1 B-	1	1
29	1997 Q2	3.01	179	187	142	FALSE		0 B-	1 B-	1 B-	1	1
68	1997 Q2	2.215	190	187	143	FALSE		0 B	1 B	1 B-	1	1
341	1997 Q2	2.654	211	215	146	FALSE		0 A	1 A	1 B-	1	1
322	1998 Q2	2.534	167	167	145	FALSE		0 A-	1 A-	1 B-	1	0
359	1995 Q3	2.948	192	194	149	FALSE		0 B-	1 B-	1 B-	3	1
17	1993 Q1	1.954	43	44	139	FALSE	CR	1	0 CR	1 B-	1	0
94	1993 Q1	1.764	75	73	142	FALSE		0 B-	1 B-	1 B-	1	0
230	1993 Q1	1.596	63	53	148	FALSE		0 B+	1 B+	1 B-	1	0
458	1995 Q1	2.285	194	198	143	FALSE		0 B+	1 B+	1 B-	2	1
93	1997 Q1	3.926	38	58	147	FALSE		0 B-	1 B-	1 B-	1	1
12	1992 Q4	2.176	85	85	143	FALSE		0 B+	1 B+	1 B	1	0
95	1993 Q4	2.596	77	69	142	FALSE		0 B+	1 B+	1 B	1	0
150	1993 Q4	1.675	92	78	147	FALSE		0 B-	1 B-	1 B	1	0
362	1995 Q4	1.5	8	4	149	FALSE		0 B+	1 B+	1 B	1	1
24	1998 Q4	3.85	16	16	147	FALSE		0 C+	1 C+	1 B	1	1
201	1998 Q4	3.293	30	28	141	FALSE	CR	1	0 CR	1 B	1	1
554	1998 Q4	3.752	42	42	146	FALSE		0 B	1 B	1 B	1	1
66	1991 Q2	1.018	33	16	144	FALSE		0 B-	1 B-	1 B	1	0
99	1991 Q2	2.665	29	33	133	FALSE		0 B-	1 B-	1 B	1	0
424	1991 Q2	2.531	29	33	142	FALSE		0 A	1 A	1 B	1	0
567	1991 Q2	1.571	28	24	149	FALSE		0 C	1 C	1 B	1	0
118	1992 Q2	0.87	67	35	138	FALSE	CR	1	0 CR	1 B	1	0
204	1992 Q2	2.88	72	84	144	FALSE		0 A-	1 A-	1 B	1	0
559	1992 Q2	2.737	80	86	131	FALSE	CR	1	0 CR	1 B	1	0

604	1992 Q2	3.418	81	87	145	FALSE		0 A-	1 A-	1 B	1	0
387	1993 Q2	3.324	111	113	141	FALSE		0 A-	1 A-	1 B	1	0
35	1995 Q2	2.082	186	190	146	FALSE		0 B	1 B	1 B	1	1
220	1995 Q2	2.945	182	186	146	FALSE		0 B+	1 B+	1 B	1	1
47	1995 Q2	2.825	187	187	146	FALSE		0 A-	1 A-	1 B	1	2
413	1995 Q2	2.664	182	188	149	FALSE		0 A-	1 A-	1 B	1	1
61	1996 Q2	3.85	8	106	144	FALSE		0 B-	1 B-	1 B	1	1
100	1996 Q2	4	12	12	147	FALSE		0 B	1 B	1 B	1	1
318	1996 Q2	2.701	255	264	146	FALSE		0 B	1 B	1 B	1	2
582	1996 Q2	2.319	177	187	148	FALSE		0 A-	1 A-	1 B	1	1
110	1996 Q2	2.631	176	192	143	FALSE		0 B	1 B	1 B	1	1
350	1996 Q2	2.235	183	167	145	FALSE		0 B+	1 B+	1 B	1	0
380	1996 Q2	3.773	38	56	142	FALSE		0 A	1 A	1 B	1	1
381	1996 Q2	2.163	195	187	148	FALSE		0 B	1 B	1 B	1	1
355	1997 Q2	2.065	246	222	131	FALSE		0 A-	1 A-	1 B	1	0
166	1998 Q2	1.877	118	114	149	FALSE		0 B	1 B	1 B	1	0
509	1993 Q3	3.071	184	186	128	FALSE	CR	1	0 CR	1 B	1	1
325	1996 Q3	2.758	233	238	143	FALSE		0 B+	1 B+	1 B	1	1
556	1998 Q3	2.409	188	195	147	FALSE	CR	1	0 CR	1 B	1	1
78	1991 Q1	2.425	16	18	146	FALSE		0 C+	1 C+	1 B	1	0
72	1992 Q1	1.993	49	43	148	FALSE		0 B+	1 B+	1 B	1	0
249	1993 Q1	2.58	20	20	149	FALSE		0 A-	1 A-	1 B	1	0
305	1995 Q1	2.437	175	187	141	FALSE	CR	1	0 CR	1 B	1	1
536	1995 Q1	2.64	182	186	147	FALSE		0 A	1 A	1 B	1	1
304	1998 Q1	2.178	155	160	143	FALSE		0 B-	1 B-	1 B	1	0
464	1994 Q4	2.818	176	186	148	FALSE		0 B	1 B	1 B+	1	1
229	1998 Q4	3.72	86	124	149	FALSE		0 B+	1 B+	1 B+	1	1
528	1991 Q2	2.5	16	18	147	FALSE		0 B+	1 B+	1 B+	1	0
52	1992 Q2	2.69	44	44	149	FALSE		0 B+	1 B+	1 B+	1	0
608	1996 Q2	2.008	211	171	137	FALSE		0 B	1 B	1 B+	1	0
379	1992 Q3	1.51	69	48	137	FALSE	CR	1	0 CR	1 B+	1	0
22	1995 Q3	2.251	188	186	140	FALSE	CR	1	0 CR	1 B+	1	1
122	1995 Q3	2.904	186	186	147	FALSE		0 A-	1 A-	1 B+	1	1
314	1992 Q1	1.925	31	29	132	FALSE	CR	1	0 CR	1 B+	1	0
497	1991 Q4	1.125	39	31	149	FALSE		0 B	1 B	1 C	2	0
103	1992 Q4	1.49	42	32	141	FALSE		0 A-	1 A-	1 C	1	0
345	1992 Q4	0.923	67	34	142	FALSE		0 C	1 C	1 C	2	0
3	1995 Q4	2.301	219	195	134	FALSE	CR	1	0 CR	1 C	1	1
142	1995 Q4	2.306	175	187	144	FALSE		0 C	1 C	1 C	1	1
612	1995 Q4	2.301	219	195	134	FALSE	CR	1	0 CR	1 C	1	1
156	1996 Q4	2.154	198	198	135	FALSE	NC	1	0 NC	1 C	1	1
403	1998 Q4	3.554	22	22	143	FALSE		0 C+	1 C+	1 C	1	1
128	1998 Q4	3.709	22	22	137	FALSE		0 B	1 B	1 C	1	1
408	1991 Q2	1.219	21	16	138	FALSE	CR	1	0 CR	1 C	1	0
492	1991 Q2	1.922	18	20	135	FALSE	CR	1	0 CR	1 C	1	0
67	1992 Q2	2.208	80	88	147	FALSE		0 C+	1 C+	1 C	2	0
117	1992 Q2	1.613	52	42	149	FALSE		0 C	1 C	1 C	1	0
141	1992 Q2	1.786	53	49	146	FALSE		0 B-	1 B-	1 C	3	0

548	1992 Q2	1.456	53	47	148	FALSE	
430	1994 Q2	1.992	68	65	146	FALSE	
34	1995 Q2	1.695	136	120	138	FALSE	
39	1995 Q2	1.804	143	132	136	FALSE	CR
502	1995 Q2	1.659	142	128	147	FALSE	
563	1995 Q2	1.663	129	114	142	FALSE	
116	1995 Q2	2.173	180	187	132	FALSE	NC
369	1995 Q2	2.603	192	190	147	FALSE	
396	1995 Q2	2.545	174	190	147	FALSE	
134	1996 Q2	2.131	204	202	143	FALSE	
399	1997 Q2	2.112	168	190	134	FALSE	CR
603	1997 Q2	1.826	187	164	149	FALSE	
269	1995 Q3	2.424	195	198	142	FALSE	
26	1997 Q3	2.508	178	191	140	FALSE	
486	1995 Q1	2.757	200	202	144	FALSE	
431	1998 Q1	2.732	194	202	141	FALSE	CR
300	1992 Q4	1.87	81	70	145	FALSE	
400	1992 Q4	1.42	68	64	128	FALSE	
2	1993 Q4	2.122	84	77	141	FALSE	CR
415	1993 Q4	1.815	99	95	148	FALSE	
611	1993 Q4	2.122	84	77	141	FALSE	CR
267	1995 Q4	2	208	177	133	FALSE	CR
136	1996 Q4	2.496	185	190	132	FALSE	CR
206	1998 Q4	2.113	145	143	149	FALSE	
532	1998 Q4	2.143	212	180	149	FALSE	
144	1998 Q4	2.371	100	102	146	FALSE	
227	1998 Q4	3.85	8	8	146	FALSE	
320	1991 Q2	1.433	12	8	144	FALSE	
420	1991 Q2	1.75	24	20	140	FALSE	CR
36	1992 Q2	2.706	50	52	142	FALSE	
11	1995 Q2	1.18	102	67	146	FALSE	
328	1995 Q2	2.965	199	203	148	FALSE	
291	1997 Q2	2.408	219	231	136	FALSE	
203	1998 Q2	1.953	181	156	149	FALSE	
539	1994 Q1	2.2	165	157	141	FALSE	CR
326	1995 Q1	2.185	121	112	135	FALSE	CR
97	1996 Q1	2.24	210	234	138	FALSE	CR
101	1998 Q1	4	34	58	138	FALSE	CR
417	1991 Q4	2.402	97	88	147	FALSE	
265	1991 Q2	1.956	25	21	145	FALSE	
344	1991 Q2	1.8	20	22	148	FALSE	
405	1991 Q2	1.824	105	80	142	FALSE	
586	1991 Q2	1.716	24	20	139	FALSE	CR
441	1992 Q2	1.063	30	23	147	FALSE	
547	1993 Q2	1.477	36	26	148	FALSE	
490	1992 Q1	1.365	35	22	145	FALSE	
223	1991 Q2	2.325	16	16	144	FALSE	
238	1990 Q4	0	0	0	146	FALSE	

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0 B-	1 B-	1 C	1	0
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0 C+	1 C+	1 C	1	0
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1	0 CR	1 C+	1	0
1	0 CR	1 C+	1	1
1	0 CR	1 C+	1	1
0 B+	1 B+	1 NC	2	0
0 B+	1 B+	1 NC	1	0
0 C	1 C	1 NC	1	0
0 B-	1 B-	1 NC	1	0
1	0 CR	1 NC	1	0
0 C	1 C	1 NC	1	0
0 B-	1 B-	1 NC	2	0
0 B	1 B	1 NC	1	0
0 C+	1 C+	1 W	1	0
0 W	1 W	1	0	0

294	1990 Q4	1.3	4	4	147	FALSE	
500	1990 Q4	0	0	0	135	FALSE	NC
9	1991 Q4	2.161	39	35	135	FALSE	CR
414	1991 Q4	1.892	26	30	139	FALSE	NC
245	1992 Q4	0.947	46	18	138	FALSE	NC
585	1992 Q4	1.093	30	18	149	FALSE	
389	1997 Q4	2.526	205	147	135	FALSE	NC
564	1998 Q4	2.039	190	194	141	FALSE	
91	1991 Q2	0.833	24	14	133	FALSE	NC
126	1991 Q2	1.08	20	12	139	FALSE	
138	1991 Q2	2.15	8	8	141	FALSE	NC
173	1991 Q2	2.383	24	24	145	FALSE	
244	1991 Q2	1.466	24	22	138	FALSE	
256	1991 Q2	1.7	32	16	131	FALSE	NC
311	1991 Q2	1.883	24	24	149	FALSE	
319	1991 Q2	0.32	25	6	134	FALSE	
392	1991 Q2	1.385	28	24	141	FALSE	CR
477	1991 Q2	0.95	32	12	132	FALSE	NC
499	1991 Q2	0.716	24	12	146	FALSE	
510	1991 Q2	0.629	37	13	148	FALSE	
533	1991 Q2	0.875	32	18	148	FALSE	
570	1991 Q2	1.5	24	20	140	FALSE	
578	1991 Q2	0.97	20	12	148	FALSE	
374	1992 Q2	1.406	62	36	144	FALSE	
470	1992 Q2	1.559	59	57	147	FALSE	
495	1992 Q2	1.479	29	25	149	FALSE	
18	1996 Q2	2.762	185	191	147	FALSE	
53	1998 Q2	2.892	179	176	146	FALSE	NC
1	1993 Q3	2.569	63	65	129	FALSE	NC
610	1993 Q3	2.569	63	65	129	FALSE	NC
6	1996 Q3	2.886	195	202	129	FALSE	CR
246	1998 Q3	2.128	205	189	148	FALSE	
65	1991 Q1	0	0	0	138	FALSE	W
69	1991 Q1	2	4	8	144	FALSE	
73	1991 Q1	2.514	7	7	138	FALSE	NC
277	1991 Q1	0	0	0	137	FALSE	NC
286	1991 Q1	0	0	0	135	FALSE	W
425	1991 Q1	2.65	8	8	142	FALSE	
609	1991 Q1	2.086	30	26	143	FALSE	NC
130	1992 Q1	0.882	29	20	138	FALSE	NC
573	1993 Q1	1.62	60	52	145	FALSE	
407	1997 Q1	2.332	78	68	134	FALSE	NC
363	1993 Q2	2.457	82	82	137	FALSE	CR
465	1997 Q2	2.77	220	222	133	FALSE	CR
596	1993 Q3	3.065	196	198	148	FALSE	
445	1994 Q3	3.028	81	81	137	FALSE	CR
561	1995 Q2	3.091	238	242	131	FALSE	CR
597	1996 Q2	3.303	211	234	128	FALSE	CR

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1	0 NC	1	0	0
1	0 W	1	0	0
0 B+	1 B+	1	0	0
1	0 NC	1	0	0
1	0 NC	1	0	0
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1	0 NC	1	0	0
2	0 CR	2 A-	1	0
2	0 CR	2 A-	1	1
0 B	2 B	2 A-	1	1
2	0 CR	2 A-	1	0
2	0 CR	2 A	1	1
2	0 CR	2 A	1	1

137	1998 Q1	2.833	24	20	138	FALSE	NC
257	1997 Q4	2.679	233	214	141	FALSE	NC
254	1998 Q4	3.091	124	120	147	FALSE	NC
330	1991 Q2	2.214	14	14	147	FALSE	
77	1995 Q2	2.999	196	208	130	FALSE	NC
174	1997 Q2	2.167	185	186	146	FALSE	
19	1991 Q2	2.55	24	30	134	FALSE	CR
520	1995 Q2	3.047	194	200	134	FALSE	NC
10	1994 Q3	3.399	180	186	139	FALSE	CR
169	1993 Q4	2.408	69	71	140	FALSE	CR
13	1995 Q4	2.067	196	186	137	FALSE	CR
239	1996 Q2	2.66	187	206	131	FALSE	CR
336	1998 Q2	2.536	310	299	137	FALSE	CR
338	1992 Q4	1.546	64	52	139	FALSE	
459	1995 Q4	1.866	158	156	133	FALSE	CR
339	1997 Q4	2.086	175	136	141	FALSE	CR
107	1992 Q2	1.031	45	25	133	FALSE	CR
423	1994 Q2	1.731	115	116	144	FALSE	NC
159	1995 Q2	2.661	190	188	142	FALSE	NC
152	1998 Q1	1.798	207	180	147	FALSE	
168	1993 Q4	1.724	106	92	141	FALSE	NC
210	1995 Q4	2.628	172	186	135	FALSE	NC
411	1995 Q2	2.902	173	175	137	FALSE	CR
255	1995 Q2	2.101	178	192	135	FALSE	CR
378	1992 Q2	1.891	60	71	138	FALSE	NC
273	1992 Q1	1.66	30	30	133	FALSE	
402	1991 Q4	1.6	20	18	131	FALSE	NC
471	1997 Q4	2.187	269	261	136	FALSE	NC
111	1991 Q2	0.6	20	10	135	FALSE	NC
264	1991 Q2	0.8	20	12	135	FALSE	NC
306	1991 Q2	1.2	14	10	141	FALSE	CR
443	1991 Q2	1	20	10	140	FALSE	NC
60	1992 Q2	1.211	59	34	140	FALSE	NC
517	1992 Q2	2.555	65	66	137	FALSE	NC
132	1992 Q1	1.119	36	18	138	FALSE	NC
231	1998 Q4	2.785	170	190	134	FALSE	CR
56	1995 Q2	2.422	178	186	133	FALSE	CR
63	1998 Q2	2.776	17	17	139	FALSE	CR
5	1994 Q4	3.083	196	198	138	FALSE	NC
7	1996 Q1	2.848	210	186	135	FALSE	CR
507	1995 Q2	2.957	250	257	130	FALSE	NC
356	1992 Q2	1.909	22	20	129	FALSE	CR
20	1991 Q2	0.616	24	8	140	FALSE	NC
292	1991 Q2	2.215	13	15	138	FALSE	CR
303	1991 Q2	0	0	0	140	FALSE	NC
523	1993 Q2	1.166	45	27	139	FALSE	NC
14	1993 Q4	2.565	64	68	126	FALSE	CR
515	1997 Q4	1.763	232	203	130	FALSE	NC

1 A	1 A	2 A	1	2
1 B	1 B	2 B-	1	1
1 A-	1 A-	2 B-	1	0
0 B	2 B	2 B-	2	0
1 B	1 B	2 B-	1	1
0 B-	2 B-	2 B-	1	1
2	0 CR	2 B	1	0
1 B+	1 B+	2 B	1	1
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2	0 CR	2 B+	1	0
1 B-	1 B-	2 B+	3	1
2	0 CR	2 B+	1	1
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0 B	2 B	2 C	1	0
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1 C	1 C	2 C	1	0
1 C+	1 C+	2 C	1	1
0 NC	2 NC	2 C	1	0
1 B+	1 B+	2 C+	1	0
1 B	1 B	2 C+	1	1
1 NC	1 CR	2 C+	1	0
2	0 CR	2 C+	1	1
1 B+	1 B+	2 NC	2	0
0 B	2 B	2 NC	1	0
1 C	1 C	2	0	0
2	0 NC	2	0	0
2	0 NC	2	0	0
2	0 NC	2	0	0
2	0 CR	2	0	0
2	0 NC	2	0	0
2	0 NC	2	0	0
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2	0 NC	2	0	0
2 B+	1 B+	3 B-	1	1
2 B	1 B	3 B-	1	1
3	0 CR	3 B-	1	1
2 B+	1 B+	3 B	1	1
3	0 CR	3 B	2	1
2 B-	1 B-	3 B+	1	2
3	0 CR	3 W	1	0
3	0 NC	3	0	0
2 B	1 B	3	0	0
3	0 NC	3	0	0
3	0 NC	3	0	0
3 C	1 C	4 B-	1	0
3 B	1 B	4 C	1	0

494	1992 Q2	1.375	32	26	139	FALSE	CR
189	1992 Q2	1.409	61	39	141	FALSE	NC
329	1993 Q4	2.079	81	79	134	FALSE	CR
525	1997 Q2	2.064	288	238	137	FALSE	CR
81	1991 Q4	3	36	40	157	TRUE	
196	1991 Q4	2.31	59	63	155	TRUE	
343	1992 Q4	2.678	92	96	155	TRUE	
175	1994 Q4	2.837	188	192	156	TRUE	
222	1994 Q4	2.302	74	70	159	TRUE	
469	1994 Q4	3.065	188	203	156	TRUE	
163	1995 Q4	2.811	186	190	158	TRUE	
368	1997 Q4	4	16	54	151	TRUE	
76	1998 Q4	3.4	26	26	152	TRUE	
526	1998 Q4	2.223	131	131	160	TRUE	
195	1991 Q2	2.833	33	41	154	TRUE	
260	1991 Q2	3.496	50	52	153	TRUE	
571	1992 Q2	2.958	53	55	152	TRUE	
593	1992 Q2	3.408	48	48	158	TRUE	
456	1993 Q2	2.541	68	68	153	TRUE	
512	1993 Q2	2.928	104	108	151	TRUE	
278	1994 Q2	3.047	164	186	157	TRUE	
23	1994 Q2	3.513	193	198	159	TRUE	
461	1995 Q2	2.808	185	187	159	TRUE	
442	1996 Q2	3.245	203	207	158	TRUE	
197	1991 Q1	2.74	20	20	154	TRUE	
178	1992 Q1	3.132	61	63	155	TRUE	
50	1994 Q1	3.181	186	190	153	TRUE	
272	1995 Q1	3.074	185	187	157	TRUE	
125	1995 Q1	2.992	193	192	152	TRUE	
248	1996 Q1	2.258	128	106	155	TRUE	
324	1997 Q1	3.44	30	50	159	TRUE	
105	1991 Q4	3.433	12	12	161	TRUE	
295	1991 Q4	2.771	56	54	156	TRUE	
296	1994 Q4	2.89	182	186	152	TRUE	
208	1994 Q4	3.318	188	190	159	TRUE	
419	1994 Q4	3.718	182	188	151	TRUE	
352	1995 Q4	3.565	186	188	155	TRUE	
154	1997 Q4	3.883	24	24	157	TRUE	
334	1997 Q4	3.973	45	45	157	TRUE	
489	1998 Q4	4	4	4	154	TRUE	
577	1991 Q2	3.275	37	37	153	TRUE	
323	1992 Q2	3.436	87	91	158	TRUE	
131	1993 Q2	2.976	52	56	155	TRUE	
86	1994 Q2	3.593	178	186	154	TRUE	
386	1994 Q2	3.962	180	186	163	TRUE	
496	1994 Q2	3.382	184	192	152	TRUE	
395	1995 Q2	2.376	186	186	152	TRUE	
64	1995 Q2	3.086	193	193	153	TRUE	

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140	1995 Q2	3.944	189	193	160	TRUE	0	0	0 A	1	1
258	1995 Q2	3.765	196	216	159	TRUE	0	0	0 A	1	1
262	1996 Q2	2.7	231	223	157	TRUE	0	0	0 A	1	1
270	1996 Q2	3.964	34	72	153	TRUE	0	0	0 A	1	1
447	1998 Q2	4	8	8	152	TRUE	0	0	0 A	1	1
370	1991 Q1	3.766	12	12	154	TRUE	0	0	0 A	1	0
482	1991 Q1	3.766	24	24	159	TRUE	0	0	0 A	1	0
87	1992 Q1	3.668	64	73	157	TRUE	0	0	0 A	1	0
89	1995 Q1	3.894	184	186	158	TRUE	0	0	0 A	1	1
74	1998 Q1	3.795	42	60	157	TRUE	0	0	0 A	1	1
120	1992 Q4	1.589	68	56	160	TRUE	0	0	0 B-	1	0
172	1992 Q4	2.722	79	81	155	TRUE	0	0	0 B-	1	0
114	1993 Q4	1.827	85	77	154	TRUE	0	0	0 B-	1	0
508	1993 Q4	1.89	90	78	152	TRUE	0	0	0 B-	1	0
335	1994 Q4	2.109	196	198	152	TRUE	0	0	0 B-	1	1
433	1994 Q4	2.388	184	202	151	TRUE	0	0	0 B-	1	1
187	1995 Q4	2.804	173	186	157	TRUE	0	0	0 B-	1	1
519	1997 Q4	1.806	194	161	151	TRUE	0	0	0 B-	1	0
44	1991 Q2	2.717	29	29	154	TRUE	0	0	0 B-	1	0
83	1991 Q2	2.526	30	36	153	TRUE	0	0	0 B-	1	0
155	1991 Q2	2.871	28	34	158	TRUE	0	0	0 B-	1	0
112	1992 Q2	2.201	57	57	158	TRUE	0	0	0 B-	1	0
127	1992 Q2	1.92	70	62	156	TRUE	0	0	0 B-	1	0
518	1993 Q2	3.356	120	120	155	TRUE	0	0	0 B-	1	0
170	1994 Q2	2.763	184	186	151	TRUE	0	0	0 B-	1	1
280	1994 Q2	2.7	156	160	158	TRUE	0	0	0 B-	1	0
521	1995 Q2	2.799	205	212	152	TRUE	0	0	0 B-	1	1
372	1996 Q2	3.529	34	34	153	TRUE	0	0	0 B-	1	1
546	1996 Q2	2.613	195	187	154	TRUE	0	0	0 B-	1	1
574	1997 Q2	2.631	204	200	157	TRUE	0	0	0 B-	1	0
235	1998 Q2	3.873	60	78	153	TRUE	0	0	0 B-	1	1
488	1998 Q2	2.406	187	181	153	TRUE	0	0	0 B-	2	0
98	1997 Q3	3.5	8	8	155	TRUE	0	0	0 B-	1	1
385	1998 Q3	3.125	169	170	156	TRUE	0	0	0 B-	1	0
84	1991 Q1	0.88	20	8	153	TRUE	0	0	0 B-	1	0
364	1992 Q1	1.332	50	30	161	TRUE	0	0	0 B-	1	0
505	1995 Q1	2.948	180	184	156	TRUE	0	0	0 B-	1	0
575	1996 Q1	2.482	188	190	159	TRUE	0	0	0 B-	1	1
240	1996 Q1	2.452	188	159	158	TRUE	0	0	0 B-	2	0
337	1996 Q1	3.106	203	206	153	TRUE	0	0	0 B-	1	1
538	1997 Q1	2.66	168	172	155	TRUE	0	0	0 B-	1	0
478	1998 Q1	1.876	214	166	154	TRUE	0	0	0 B-	1	0
180	1991 Q4	2.28	30	32	152	TRUE	0	0	0 B	1	0
299	1991 Q4	2.837	32	32	154	TRUE	0	0	0 B	1	0
373	1991 Q4	1.957	49	58	151	TRUE	0	0	0 B	1	0
432	1991 Q4	2.37	50	52	159	TRUE	0	0	0 B	1	0
449	1992 Q4	1.661	67	71	152	TRUE	0	0	0 B	1	0
569	1995 Q4	3.06	184	186	160	TRUE	0	0	0 B	1	1

186	1995 Q4	3.124	199	201	155	TRUE
214	1995 Q4	2.965	210	220	152	TRUE
288	1995 Q4	2.437	87	79	152	TRUE
501	1996 Q4	2.451	199	201	152	TRUE
530	1996 Q4	2.424	208	216	153	TRUE
55	1997 Q4	2.54	170	156	157	TRUE
171	1997 Q4	3.466	30	50	156	TRUE
455	1997 Q4	3.248	50	50	158	TRUE
106	1998 Q4	2.712	172	166	153	TRUE
215	1991 Q2	2.333	36	36	154	TRUE
289	1991 Q2	2.366	36	38	155	TRUE
139	1992 Q2	3.808	91	93	154	TRUE
247	1992 Q2	2.964	77	79	151	TRUE
266	1992 Q2	1.733	57	43	158	TRUE
397	1992 Q2	2.416	67	73	152	TRUE
462	1992 Q2	2.895	68	77	156	TRUE
583	1992 Q2	2.193	77	73	151	TRUE
252	1993 Q2	2.807	56	58	155	TRUE
348	1993 Q2	3.447	122	122	151	TRUE
474	1993 Q2	2.801	102	102	156	TRUE
179	1994 Q2	2.093	122	104	156	TRUE
124	1995 Q2	3.104	189	191	161	TRUE
259	1995 Q2	3.319	183	190	158	TRUE
88	1995 Q2	2.812	208	204	153	TRUE
434	1995 Q2	2.631	182	186	157	TRUE
147	1996 Q2	2.059	224	194	156	TRUE
162	1996 Q2	2.295	196	192	152	TRUE
276	1996 Q2	2.562	197	207	151	TRUE
135	1996 Q2	2.36	205	203	154	TRUE
192	1996 Q2	2.538	192	194	154	TRUE
261	1996 Q2	3.249	185	193	156	TRUE
487	1997 Q2	2.097	127	121	151	TRUE
551	1997 Q2	3.082	227	218	154	TRUE
557	1997 Q2	3.9	34	62	154	TRUE
599	1997 Q2	0.584	39	14	153	TRUE
605	1997 Q2	3.205	192	186	152	TRUE
43	1995 Q3	3.788	50	68	151	TRUE
562	1995 Q3	2.675	207	210	154	TRUE
558	1997 Q3	3.551	58	78	155	TRUE
504	1991 Q1	3.433	12	12	154	TRUE
28	1992 Q1	2.003	27	27	154	TRUE
33	1992 Q1	0.643	46	16	156	TRUE
185	1993 Q1	2.776	77	95	159	TRUE
271	1993 Q1	2.43	66	66	153	TRUE
232	1995 Q1	2.936	182	186	154	TRUE
463	1997 Q1	2.349	194	198	159	TRUE
283	1990 Q4	2.825	16	16	154	TRUE
30	1991 Q4	2.52	20	22	152	TRUE

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315	1992 Q4	1.306	49	34	155	TRUE	0	0	0 B+	1	0
595	1992 Q4	2.758	84	86	155	TRUE	0	0	0 B+	1	0
221	1993 Q4	2.524	100	99	151	TRUE	0	0	0 B+	1	0
529	1993 Q4	3.501	184	186	152	TRUE	0	0	0 B+	1	1
375	1993 Q4	2.375	49	51	154	TRUE	0	0	0 B+	1	0
390	1995 Q4	2.617	188	186	156	TRUE	0	0	0 B+	1	1
27	1996 Q4	2.255	174	168	154	TRUE	0	0	0 B+	1	0
427	1998 Q4	3.005	38	62	157	TRUE	0	0	0 B+	2	1
216	1991 Q2	1.975	16	14	157	TRUE	0	0	0 B+	1	0
307	1991 Q2	1.454	22	12	158	TRUE	0	0	0 B+	1	0
384	1991 Q2	2.758	39	41	152	TRUE	0	0	0 B+	1	0
440	1991 Q2	2.98	20	20	154	TRUE	0	0	0 B+	1	0
346	1993 Q2	1.6	61	51	156	TRUE	0	0	0 B+	1	0
365	1993 Q2	3.002	107	109	152	TRUE	0	0	0 B+	1	0
452	1993 Q2	1.817	82	60	153	TRUE	0	0	0 B+	1	0
576	1993 Q2	2.145	68	66	159	TRUE	0	0	0 B+	1	0
460	1994 Q2	3.028	176	188	158	TRUE	0	0	0 B+	1	1
491	1994 Q2	3.151	180	186	157	TRUE	0	0	0 B+	1	1
588	1994 Q2	3.074	193	202	156	TRUE	0	0	0 B+	1	1
42	1995 Q2	2.623	228	238	157	TRUE	0	0	0 B+	1	1
416	1997 Q2	2.946	210	214	151	TRUE	0	0	0 B+	1	1
213	1998 Q2	2.208	235	219	151	TRUE	0	0	0 B+	1	0
217	1998 Q2	3.118	203	192	157	TRUE	0	0	0 B+	1	1
153	1998 Q2	3.769	26	30	151	TRUE	0	0	0 B+	1	1
15	1992 Q3	2.668	83	85	151	TRUE	0	0	0 B+	1	0
347	1994 Q3	3.043	184	186	153	TRUE	0	0	0 B+	1	1
589	1997 Q3	3.153	93	93	152	TRUE	0	0	0 B+	2	0
333	1991 Q1	2.416	25	25	159	TRUE	0	0	0 B+	1	0
321	1992 Q1	2.93	40	40	159	TRUE	0	0	0 B+	1	0
102	1993 Q1	3.322	118	118	154	TRUE	0	0	0 B+	1	0
484	1995 Q1	3.171	177	187	153	TRUE	0	0	0 B+	1	1
198	1995 Q1	3.125	196	198	155	TRUE	0	0	0 B+	1	1
438	1995 Q1	3.181	176	206	153	TRUE	0	0	0 B+	1	1
57	1996 Q1	2.241	192	188	157	TRUE	0	0	0 B+	1	1
357	1996 Q1	2.445	196	198	152	TRUE	0	0	0 B+	1	1
113	1997 Q1	2.748	210	194	153	TRUE	0	0	0 B+	2	1
310	1997 Q1	2.95	103	105	157	TRUE	0	0	0 B+	1	0
513	1997 Q1	1.983	161	136	155	TRUE	0	0	0 B+	1	0
602	1991 Q4	1.309	44	28	153	TRUE	0	0	0 C	1	0
157	1992 Q4	1.719	71	61	155	TRUE	0	0	0 C	1	0
298	1992 Q4	1.651	79	65	157	TRUE	0	0	0 C	1	0
32	1995 Q4	3.94	30	48	158	TRUE	0	0	0 C	1	1
181	1995 Q4	2.094	202	188	151	TRUE	0	0	0 C	1	1
366	1998 Q4	2.081	133	108	151	TRUE	0	0	0 C	1	0
466	1998 Q4	2.728	78	80	158	TRUE	0	0	0 C	1	0
568	1998 Q4	2.532	152	148	156	TRUE	0	0	0 C	1	0
37	1991 Q2	2.219	21	21	157	TRUE	0	0	0 C	1	0
475	1991 Q2	1.371	28	22	155	TRUE	0	0	0 C	1	0

409	1993 Q2	2.022	54	52	153	TRUE
21	1996 Q2	1.87	192	162	155	TRUE
451	1996 Q2	2.841	186	186	158	TRUE
542	1996 Q2	2.674	177	188	153	TRUE
367	1997 Q2	2.24	206	206	151	TRUE
371	1997 Q2	1.969	201	159	162	TRUE
550	1998 Q2	2.313	183	183	153	TRUE
290	1998 Q2	1.849	171	147	151	TRUE
31	1991 Q1	2.476	13	13	152	TRUE
161	1991 Q1	1.463	22	14	153	TRUE
224	1991 Q1	2.283	24	20	151	TRUE
251	1991 Q1	2.283	24	24	158	TRUE
284	1991 Q1	2.07	27	27	154	TRUE
391	1991 Q1	2.168	25	25	154	TRUE
498	1992 Q1	0.974	31	23	153	TRUE
285	1992 Q1	1.698	57	37	153	TRUE
591	1992 Q1	3.265	64	66	156	TRUE
606	1995 Q1	2.877	161	189	153	TRUE
393	1995 Q1	2.711	184	186	155	TRUE
165	1998 Q1	3.9	40	44	153	TRUE
566	1990 Q4	2.73	10	10	151	TRUE
80	1994 Q4	1.461	189	147	151	TRUE
177	1995 Q4	2.898	185	190	153	TRUE
146	1996 Q4	2.246	200	198	153	TRUE
446	1998 Q4	2.844	90	92	155	TRUE
49	1991 Q2	1.883	24	20	152	TRUE
457	1991 Q2	1.69	40	32	152	TRUE
237	1992 Q2	0.613	15	4	151	TRUE
82	1994 Q2	3.036	132	136	151	TRUE
176	1995 Q2	2.595	189	195	153	TRUE
287	1995 Q2	2.283	176	186	153	TRUE
351	1996 Q2	3.025	235	240	159	TRUE
158	1998 Q2	2.532	209	207	157	TRUE
268	1998 Q2	3.9	24	24	157	TRUE
207	1996 Q3	2.798	194	194	162	TRUE
301	1998 Q3	4	4	4	154	TRUE
194	1995 Q1	2.638	180	186	152	TRUE
193	1998 Q1	2.389	184	182	154	TRUE
218	1990 Q4	0	0	0	151	TRUE
219	1990 Q4	2	5	14	152	TRUE
228	1990 Q4	0	0	0	154	TRUE
317	1990 Q4	0	0	0	155	TRUE
382	1990 Q4	0	0	0	155	TRUE
444	1990 Q4	0	0	0	157	TRUE
468	1990 Q4	0	0	0	155	TRUE
537	1990 Q4	0.888	9	4	159	TRUE
297	1991 Q4	2.35	8	8	154	TRUE
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0	0	0 C+	1	0
0	0	0 C+	1	0
0	0	0 C+	1	1
0	0	0 C+	1	0
0	0	0 C+	1	1
0	0	0 C+	1	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	2	0
0	0	0 NC	2	0

354	1991 Q4	2.005	35	26	159	TRUE
199	1991 Q2	1.616	24	20	152	TRUE
332	1991 Q2	2.405	56	48	155	TRUE
476	1992 Q2	1.386	76	66	151	TRUE
70	1991 Q1	1.333	12	8	157	TRUE
149	1991 Q1	0	0	0	159	TRUE
242	1991 Q1	0	0	0	161	TRUE
580	1991 Q1	0	0	0	152	TRUE
71	1992 Q1	1.578	33	25	158	TRUE
302	1991 Q4	2.566	12	14	153	TRUE
243	1997 Q2	2.594	208	208	156	TRUE
109	1990 Q4	3.7	4	4	160	TRUE
160	1990 Q4	1.105	17	8	155	TRUE
293	1990 Q4	1.1	12	8	152	TRUE
358	1990 Q4	0	0	0	154	TRUE
437	1990 Q4	2.35	8	8	152	TRUE
552	1990 Q4	1.433	12	8	162	TRUE
401	1992 Q4	2.08	20	20	152	TRUE
467	1992 Q4	1.17	24	15	155	TRUE
404	1998 Q4	2.85	147	153	155	TRUE
275	1991 Q2	2.252	25	34	155	TRUE
426	1991 Q2	2.333	24	24	153	TRUE
450	1991 Q2	2.217	35	37	154	TRUE
436	1995 Q3	2.573	207	199	159	TRUE
58	1991 Q1	0	0	0	156	TRUE
361	1991 Q1	2.5	8	8	161	TRUE
383	1991 Q1	1.6	20	14	151	TRUE
410	1991 Q1	0	0	0	152	TRUE
428	1991 Q1	3.052	25	25	157	TRUE
435	1991 Q1	3.207	13	13	153	TRUE
453	1991 Q1	0.5	8	4	154	TRUE
565	1991 Q1	2.766	12	12	158	TRUE
581	1991 Q1	2.866	12	12	152	TRUE
598	1991 Q1	1.675	16	12	154	TRUE
422	1998 Q1	1.932	197	173	153	TRUE
104	1995 Q2	3.06	195	201	155	TRUE
143	1996 Q2	1.934	171	154	151	TRUE
191	1998 Q1	2.575	16	16	152	TRUE
46	1991 Q2	0.781	22	10	153	TRUE

0	0	0 NC	2	0
0	0	0 NC	2	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	1	0
0	0	0 NC	2	0
0	0	0 W	1	0
0	0	0 W	2	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	1
0 B	1 B	1 B	1	1
0 B	1 B	1 B	1	0
0 B-	1 B-	1 B	1	0
0 NC	2 NC	2	0	0

APPENDIX D

VISUAL BASIC COMPUTER

PROGRAM PRINTOUT

```
Attribute VB_Name = "Module1"
'********************************************************************************
' CSUSB Student Record Input Routines
'
' This application will read in a set of files, provided by CSUSB, in order to extract
' meaningful data for statistical use.  It is currently developed for use in tracking
' the students who have taken the EPT test, and their progress as they take, or skip,
' the pre-baccalaureate classes.
'
' It provides a summary display on the screen upon completion, as well as providing a
' comma separated value file (.CSV), suitable for reading into a spreadsheet for
' furter analysis.
'
' This application can be used to perform similar data analysis tasks once modified.
'
' The right to modify and redistribute this application as anyone sees fit is hereby
' granted to the staff of CSUSB, and any designates.
'
'********************************************************************************

Public fMainForm As frmMain

' The following describes the student information writing proficiency exam averages
' record.  It will be used to build statistical summaries on the data.
```

```
Type EPTinfo
     EPT_Passed As Integer
     EPT_Failed As Integer
     Prec_Pass As Integer
     prec_attempts As Integer
     prec_fail As Integer
     e101_pass As Integer
     e101_attempts As Integer
     e101_fail As Integer
     wep_passed As Integer
     baccalaureate As Integer
     Masters As Integer
     Certificate As Integer
     last_qtr(40) As Integer
End Type

'*************************************************************************
' studeninfo record type.
'
' This record type is used to store the relevant information about any given student.
'
' It is built in the second stage of the application to build the database up for
' statistical analysis.
'
' At the time data is read in, the student record is found for the test information
' and combined into the relevant information.
'
```

```
' It includes the final grade and number of attempts for each of the relevant classes,
' as well as last known cumulative gpa, ending quarter for which we have a record,
' number of degrees awarded, as well as what they are.
'*************************************************************************************

Type studentinfo
     studentid As String
     degrees_awarded(10) As String
     num_degrees As Integer
     start_quarter As String
     end_quarter As String
     cum_gpa As String
     gpa As Double
     Units_attempted As Integer
     Units_awarded As Integer
     EPT_Score As Integer
     EPT_Passed As Boolean
     Eng085_Grade As String
     Eng085_tries As Integer
     Eng095_Grade As String
     Eng095_tries As Integer
     Pre101_grade As String
     Pre101_tries As Integer
     Eng101_Grade As String
     Eng101_tries As Integer
End Type

'*************************************************************************************
```

```
' Start of main program.
'*************************************************************************

Sub Main()

'*************************************************************************
' First allocate the data structres and arrays we will be using.
'*************************************************************************

    Dim a(1000) As String     ' a is used several times for different purposes.

    Dim student_record(5000) As studentinfo ' Allocate up to 5000 student records

    Dim Quarter(40) As String ' We currently are looking at no more than 40 quarters

    Dim tested_ids(2000) As String ' Student ids, never used for output.

    Dim Tested_info(2000) As String ' Student test information.

    Dim EPT_Passed As EPTinfo ' Information stats for students who passed EPT

    Dim EPT_Failed_Took_PreC As EPTinfo ' Information stats for students who took
                                        ' precollegiate classes

    Dim EPT_Failed_Skipped_PreC As EPTinfo ' Information stats for students who
                                           ' skipped precollegiate classes.


'*************************************************************************
```

```
'
'  Files information.  These are all of the files used by the application,
'  along with a Files_Location designating what directory they are stored in.
'
'  Be certain to modify the Files_Location parameter before using on a different
'  system.
'
'*************************************************************************

    Files_Location = "C:\My Documents\Janis\Thesis\Thesis\"
    Primary_Raw = Files_Location + "engtran.doc"
    Secondary_Raw = Files_Location + "engtrant.doc"
    extract_File = Files_Location + "Extract.Txt"
    tested_ids_File = Files_Location + "Engtested.Txt"
    Output_Spreadsheet = Files_Location + "Stat_Output.Csv"
    Summary_File = Files_Location + "Stat_Output.Txt"

'*************************************************************************
' Now display the initial form within the application window.  This will be used
' to display progress when we are reading files and processing the data.
'*************************************************************************


    Set fMainForm = New frmMain
    fMainForm.Show

    Static lDocumentCount As Long
    Dim frmD As frmDocument
    lDocumentCount = lDocumentCount + 1
    Set frmD = New frmDocument
```

```
    frmD.Caption = "College Document " & lDocumentCount
    frmD.Show
    frmD.SetFocus

'*****************************************************************************
' After the first time the initial documents have been read, we no longer need to
' read the file, unless it has changed.  For that reason, we ask the user if this
' is needed.
'*****************************************************************************

    Status = MsgBox("Read In Raw Documents?", vbYesNoCancel, "File Load")
    If Status = vbCancel Then End
    If Status = vbNo Then GoTo Phase2

'*****************************************************************************
' Open the main files, Engtran.Doc and Extract.txt
'
' Engtran.Doc is the main report file provided.
' Extract.txt is the extracted information passed to the second phase in single
' column format.
'*****************************************************************************


    Open Primary_Raw For Input As #1
    Open extract_File For Output As #2

Phase1:
```

```
While Not EOF(1)

    i = 0
    a(1) = ""
    a(2) = ""

'*************************************************************************
' A 1 in the first column signifies a new printed page.
' We read in an entire page, and separate out the individual columns.
' All white space lines are also discarded during this pass.
'*************************************************************************

    While ((Not (Left$(a(i), 1) Like "1")) And (Not (EOF(1))))

    i = i + 1
    Line Input #1, a(i)
    Wend

    For k = 1 To i - 1
      If (Not (Trim(Mid(a(k), 2, 64)) Like "")) Then
        Print #2, Mid(a(k), 2, 64)
        End If

    Next k
    For k = 1 To i - 1
      If (Not (Trim(Mid(a(k), 66, Len(a(k)))) Like "")) Then
       Print #2, Mid(a(k), 66, Len(a(k)) - 66)
       End If

    Next k
```

```
Wend

frmD.Status.Caption = "Initial Raw File Load Completed!"
frmD.Status.Refresh
Close #1
If input_file = 1 Then GoTo close_2
input_file = 1

'*************************************************************************
' Since we were provided with two raw files (the second one is for students starting
' in the summer quarter), we had to read them in as well
'*************************************************************************

frmD.Status.Caption = "Opening Secondary Raw File"
frmD.Status.Refresh
Open Secondary_Raw For Input As #1

GoTo Phase1
close_2:
Close #2

'*************************************************************************
' Phase 2 reads in the entran.txt file, which is the single column format version
' of the raw data file.  It also reads in the tested_ids file to gather the
' list of student I.D.#s which have taken the test, and were found to require
' remedial classes in English.
'*************************************************************************

Phase2:
i = 1
```

```
frmD.Status.Caption = "Reading College Record Presort File and loading into memory -
Phase 2"
frmD.Status.Refresh

'*****************************************************************************
' Generate array of tested student ids
'*****************************************************************************

Open tested_ids_File For Input As #2
While Not EOF(2) And i < 2000
  Line Input #2, tested_id
  tested_ids(i) = Mid(tested_id, 5, 9)
  Tested_info(i) = tested_id
  i = i + 1
Wend
total_tested = i
Close #2

i = 0
'*****************************************************************************
' Now start reading the actual raw data file.
'*****************************************************************************

Open extract_File For Input As #1

'*****************************************************************************
' Read until 20000 students, or we run out of file.
'*****************************************************************************

While Not EOF(1) And i < 20000  ' Increase this number for larger populations
```

```
    Line Input #1, a(1)
next_record:
'*************************************************************************
' First check whether this line has a valid student id in it, and test if it is
' the start of a new student record
'*************************************************************************

    If Mid(a(1), 12, 11) Like "###-##-####" Then
      stu_id = Mid(a(1), 12, 3) & Mid(a(1), 16, 2) & Mid(a(1), 19, 4)
      If Not (a(1) Like student_record(i).studentid) Then
      '*************************************************************************
      ' If the previous student attended any quarters, save info and go to next record
      '*************************************************************************
        If student_record(i).end_quarter <> "" Then i = i + 1
        test_member = False
        '*************************************************************************
        ' Check that this student is in the tested group.
        '*************************************************************************
        For k = 1 To total_tested
          If stu_id = tested_ids(k) Then
            test_member = True
            EPT_Score = Mid(Tested_info(k), 51, 3)
          End If
        Next k
      If test_member = False Then ' if this is NOT a tested student
```

```
        frmD.Degree.Caption = "" ' clear out current student display
        frmD.Degree.Refresh
        a(1) = ""
        ' Quickly skip through to the next student record
        While Not Mid(a(1), 12, 11) Like "###-##-####"
          Line Input #1, a(1)
        Wend
        GoTo next_record ' go back to check the next student out.
      End If

        '*************************************************************************
        ' Otherwise, the student is valid. Start loading up data structures and
        ' update the caption
        '*************************************************************************

        student_record(i).studentid = a(1)
        student_record(i).EPT_Score = EPT_Score
        If EPT_Score > 150 Then
          student_record(i).EPT_Passed = True
        Else
          student_record(i).EPT_Passed = False
        End If
        frmD.RecNum.Caption = "Record #: " & i
        frmD.RecNum.Refresh
      End If
    End If
'*****************************************************************************
' Check for any degrees (Masters, Bachelors, or Certificates) awarded.
```

```
'*************************************************************************************
    If a(1) Like "*Degrees Awarded:*" Then
      Line Input #1, a(2)
      j = 1
      While Not (a(2) Like "*--------------*")
        If (a(2) Like "*Bachelor*") Or (a(2) Like "*Master*") Or (a(2) Like
"*Certificate*") Then
          student_record(i).degrees_awarded(j) = a(2)
          frmD.Degree.Caption = "Degree: " & a(2)
          frmD.Degree.Refresh
          student_record(i).num_degrees = j
          j = j + 1
        End If
        Line Input #1, a(2)
        a(1) = a(2)
        If j = 11 Then Stop  ' If we ever get eleven or more degrees, something is
strange!
      Wend
    End If

'*************************************************************************************
' Break out the cumulative information record for the student.
'*************************************************************************************

    If InStr(1, a(1), " Cumulative ", vbBinaryCompare) Then
      student_record(i).cum_gpa = a(1)

      a(2) = Mid(a(1), 46, 8)
      If (Mid(a(1), 51, 8) Like "*#.#*") Then
        student_record(i).Units_attempted = Mid(a(1), 17, 16)
```

```
        student_record(i).Units_awarded = Mid(a(1), 35, 8)
        student_record(i).gpa = Mid(a(1), 51, 8)
      End If
    End If

'*************************************************************************
' If this is a quarter information record, save it.  The last one for the student
' will become the last quarter attended.
'*************************************************************************

    If a(1) Like "* 19##-*" Then
      student_record(i).end_quarter = a(1)
    End If

'*************************************************************************
' Check for specific courses here.  Add up counters for 085, 095, 101, as well
' as precollegiate courses in general.
'*************************************************************************

    course = Mid(a(1), 3, 7)
  If course Like "ENG *" Then
    If course Like "ENG 085" Then
      If student_record(i).Eng085_tries = 0 Then E85_taken = E85_taken + 1
      student_record(i).Eng085_tries = student_record(i).Eng085_tries + 1
      student_record(i).Eng085_Grade = Mid(a(1), 44, 2)
      student_record(i).Pre101_tries = student_record(i).Pre101_tries + 1
      student_record(i).Pre101_grade = Mid(a(1), 44, 2)
      If Mid(a(1), 44, 2) Like "CR" Then E85_pass = E85_pass + 1
    End If
      If course Like "ENG 095" Then
```

```
      If student_record(i).Eng095_tries = 0 Then E95_taken = E95_taken + 1
      student_record(i).Eng095_tries = student_record(i).Eng095_tries + 1
      student_record(i).Eng095_Grade = Mid(a(1), 44, 2)
      student_record(i).Pre101_tries = student_record(i).Pre101_tries + 1
      student_record(i).Pre101_grade = Mid(a(1), 44, 2)
      Select Case Mid(a(1), 44, 1)
       Case "A", "B", "C", "D"
        E095_pass = E095_pass + 1
      End Select
    End If

      If course Like "ENG 101" Then
      If student_record(i).Eng101_tries = 0 Then E101_taken = E101_taken + 1
      student_record(i).Eng101_tries = student_record(i).Eng101_tries + 1
      student_record(i).Eng101_Grade = Mid(a(1), 44, 2)
      Select Case Mid(a(1), 44, 1)
       Case "A", "B", "C", "D"
        e101_pass = e101_pass + 1
      End Select
    End If
  End If
'*******************************************************************************
' End of record processing.  Read in the next record
'*******************************************************************************

Wend

'*******************************************************************************
' Finished reading in all records from the file.
'*******************************************************************************
```

```
    Close #1
frmD.Status.Caption = "Array Build Completed."
frmD.Status.Refresh
'    Debug.Print "Array Build Completed."

Total_Students = i

'*************************************************************************************
' Build array of compare strings for the quarters
'*************************************************************************************

Quarter(1) = "*-Fall 1990-*"
Quarter(2) = "*-Winter 1991-*"
Quarter(3) = "*-Spring 1991-*"
Quarter(4) = "*-Summer 1991-*"
Quarter(5) = "*-Fall 1991-*"
Quarter(6) = "*-Winter 1992-*"
Quarter(7) = "*-Spring 1992-*"
Quarter(8) = "*-Summer 1992-*"
Quarter(9) = "*-Fall 1992-*"
Quarter(10) = "*-Winter 1993-*"
Quarter(11) = "*-Spring 1993-*"
Quarter(12) = "*-Summer 1993-*"
Quarter(13) = "*-Fall 1993-*"
Quarter(14) = "*-Winter 1994-*"
Quarter(15) = "*-Spring 1994-*"
Quarter(16) = "*-Summer 1994-*"
Quarter(17) = "*-Fall 1994-*"
Quarter(18) = "*-Winter 1995-*"
```

```
Quarter(19) = "*-Spring 1995-*"
Quarter(20) = "*-Summer 1995-*"
Quarter(21) = "*-Fall 1995-*"
Quarter(22) = "*-Winter 1996-*"
Quarter(23) = "*-Spring 1996-*"
Quarter(24) = "*-Summer 1996-*"
Quarter(25) = "*-Fall 1996-*"
Quarter(26) = "*-Winter 1997-*"
Quarter(27) = "*-Spring 1997-*"
Quarter(28) = "*-Summer 1997-*"
Quarter(29) = "*-Fall 1997-*"
Quarter(30) = "*-Winter 1998-*"
Quarter(31) = "*-Spring 1998-*"
Quarter(32) = "*-Summer 1998-*"
' Initialize some more counters  .....
Students_took_prec = 0
Students_skipped_prec = 0
frmD.Status.Caption = " Processing student records."
Open Output_Spreadsheet For Output As #1

Print #1, "Student Number, Starting Quarter, Ending Quarter, GPA, Units attempted,
Units Awarded,";
Print #1, " EPT Score, EPT Passed, Eng085 Grade,";
Print #1, " Eng085 Attempts, Eng095 Grade, Eng095 Attempts, Pre101 Grade, Pre101
Attempts,";
Print #1, " Eng101 Grade, Eng101 Attempts, Degrees Awarded,";
Print #1, " Degree 1, Year, Degree 2, Year, Degree 3, Year, Degree 4, Year, Degree 5,
Year, Degree 6, Year, Degree 7, Year,";
Print #1, " Degree 8, Year, Degree 9, Year, Degree 10, Year"
```

```
For i = 1 To Total_Students

Print #1, i; ",";

Print #1, student_record(i).start_quarter; ",";
Print #1, student_record(i).end_quarter; ",";
Print #1, student_record(i).gpa; ",";
Print #1, student_record(i).Units_attempted; ",";
Print #1, student_record(i).Units_awarded; ",";
' Print #1, student_record(i).cum_gpa; ",";
Print #1, student_record(i).EPT_Score; ",";
Print #1, student_record(i).EPT_Passed; ",";
Print #1, student_record(i).Eng085_Grade; ",";
Print #1, student_record(i).Eng085_tries; ",";
Print #1, student_record(i).Eng095_Grade; ",";
Print #1, student_record(i).Eng095_tries; ",";
Print #1, student_record(i).Pre101_grade; ",";
Print #1, student_record(i).Pre101_tries; ",";
Print #1, student_record(i).Eng101_Grade; ",";
Print #1, student_record(i).Eng101_tries; ",";
Print #1, student_record(i).num_degrees; ",";
For j = 1 To 10
  Print #1, ""; student_record(i).degrees_awarded(j); ""; ",";
Next j
Print #1, ""

frmD.RecNum.Caption = "Rec # " & i
frmD.RecNum.Refresh

If student_record(i).EPT_Passed Then
```

```
EPT_Passed.EPT_Passed = EPT_Passed.EPT_Passed + 1

For j = 1 To 32
 If student_record(i).end_quarter Like Quarter(j) Then
  EPT_Passed.last_qtr(j) = EPT_Passed.last_qtr(j) + 1
 End If
Next j

For j = 1 To 1
If student_record(i).degrees_awarded(j) Like "*Bachelor*" Then

  EPT_Passed.baccalaureate = EPT_Passed.baccalaureate + 1
End If

If student_record(i).degrees_awarded(j) Like "*Master*" Then
  EPT_Passed.Masters = EPT_Passed.Masters + 1
End If

If student_record(i).degrees_awarded(j) Like "*Certificate*" Then
  EPT_Passed.Certificate = EPT_Passed.Certificate + 1
End If

Select Case Mid(student_record(i).Eng101_Grade, 1, 1)
    Case "A", "B", "C", "D": EPT_Passed.e101_pass = EPT_Passed.e101_pass + 1
End Select

Next j

Else
```

```
If student_record(i).Pre101_tries > 0 Then

Students_took_prec = Students_took_prec + 1

For j = 1 To 32
 If student_record(i).end_quarter Like Quarter(j) Then
  EPT_Failed_Took_PreC.last_qtr(j) = EPT_Failed_Took_PreC.last_qtr(j) + 1
 End If
Next j

For j = 1 To 1
If student_record(i).degrees_awarded(j) Like "*Bachelor*" Then
  EPT_Failed_Took_PreC.baccalaureate = EPT_Failed_Took_PreC.baccalaureate + 1
End If

If student_record(i).degrees_awarded(j) Like "*Master*" Then
  EPT_Failed_Took_PreC.Masters = EPT_Failed_Took_PreC.Masters + 1
End If

If student_record(i).degrees_awarded(j) Like "*Certificate*" Then
  EPT_Failed_Took_PreC.Certificate = EPT_Failed_Took_PreC.Certificate + 1
End If

Select Case Mid(student_record(i).Eng101_Grade, 1, 1)
    Case "A", "B", "C", "D": EPT_Failed_Took_PreC.e101_pass =
EPT_Failed_Took_PreC.e101_pass + 1
End Select

Next j
```

```
Else

Students_skipped_prec = Students_skipped_prec + 1

For j = 1 To 32
 If student_record(i).end_quarter Like Quarter(j) Then
  EPT_Failed_Skipped_PreC.last_qtr(j) = EPT_Failed_Skipped_PreC.last_qtr(j) + 1
 End If
Next j

For j = 1 To 1
If student_record(i).degrees_awarded(j) Like "*Bachelor*" Then
  EPT_Failed_Skipped_PreC.baccalaureate = EPT_Failed_Skipped_PreC.baccalaureate + 1
End If

If student_record(i).degrees_awarded(j) Like "*Master*" Then
  EPT_Failed_Skipped_PreC.Masters = EPT_Failed_Skipped_PreC.Masters + 1
End If

If student_record(i).degrees_awarded(j) Like "*Certificate*" Then
  EPT_Failed_Skipped_PreC.Certificate = EPT_Failed_Skipped_PreC.Certificate + 1
End If

Select Case Mid(student_record(i).Eng101_Grade, 1, 1)
    Case "A", "B", "C", "D": EPT_Failed_Skipped_PreC.e101_pass =
EPT_Failed_Skipped_PreC.e101_pass + 1
End Select

Next j
End If
```

```
End If


Next i

Close #1
frmD.Status.Caption = "Statistics gathered."
frmD.Status.Refresh
'        Debug.Print "Statistics gathered."


Open Summary_File For Output As #1
Print #1, "Students Who Took Precollegiate Classes: ", Students_took_prec
Print #1, "Passed English 101: ", EPT_Failed_Took_PreC.e101_pass
Print #1, "Baccalaureates awarded:", EPT_Failed_Took_PreC.baccalaureate
Print #1, "Masters Awarded:", EPT_Failed_Took_PreC.Masters

Print #1, "Students Who Skipped Precollegiate Classes: ", Students_skipped_prec
Print #1, "Passed English 101: ", EPT_Failed_Skipped_PreC.e101_pass
Print #1, "Baccalaureates awarded: ", EPT_Failed_Skipped_PreC.baccalaureate
Print #1, "Masters Awarded:", EPT_Failed_Skipped_PreC.Masters


' EPTFailed_Took_PreC
Close #1


Static lSummaryCount As Long
Dim frmS As frmSummary
lSummaryCount = lSummaryCount + 1
```

```
Set frmS = New frmSummary
frmS.Show
frmS.SetFocus
frmS.Prec_Class.Caption = "Students who took the EPT Test:  " & Total_Students
frmS.Prec_Class.Refresh
frmS.Prec_Taken(0).Caption = "Students taking precollegiate classes: " &
Students_took_prec
frmS.Prec_Taken(0).Refresh
frmS.TookPrec_P101(0).Caption = "Passed English 101: " &
EPT_Failed_Took_PreC.e101_pass
frmS.TookPrec_P101(0).Refresh
frmS.Bachelors.Caption = "Students awarded Baccalaureates:  " &
EPT_Failed_Took_PreC.baccalaureate
frmS.Bachelors.Refresh
frmS.Masters.Caption = "Students awarded Masters:  " & EPT_Failed_Took_PreC.Masters
frmS.Masters.Refresh
frmS.Certificates.Caption = "Students awarded Certificates " &
EPT_Failed_Took_PreC.Certificate
frmS.Certificates.Refresh
frmS.Skipped_PreC.Caption = "Students skipping precollegiate classes: " &
Students_skipped_prec
frmS.Prec_Taken(0).Refresh
frmS.Skipped_P101.Caption = "Passed English 101:  " &
EPT_Failed_Skipped_PreC.e101_pass
frmS.Skipped_P101.Refresh
frmS.Bachelors_NoPrec.Caption = "Students awarded Baccalaureates:  " &
EPT_Failed_Skipped_PreC.baccalaureate
frmS.Bachelors_NoPrec.Refresh
frmS.Masters_NoPrec.Caption = "Students awarded Masters:  " &
EPT_Failed_Skipped_PreC.Masters
```

```
frmS.Masters_NoPrec.Refresh
frmS.Certificates_NoPrec = "Students awarded Certificates:  " &
EPT_Failed_Skipped_PreC.Certificate
frmS.Certificates_NoPrec.Refresh
frmS.EPT_Passed.Caption = "Students who passed EPT Test: " & EPT_Passed.EPT_Passed
frmS.EPT_Passed.Refresh
frmS.EPT_P101(1).Caption = "Passed English 101:  " & EPT_Passed.e101_pass
frmS.EPT_P101(1).Refresh
frmS.EPT_Baccalareates.Caption = "Students awarded Baccalaureates: " &
EPT_Passed.baccalaureate
frmS.EPT_Baccalareates.Refresh
frmS.EPT_Masters.Caption = "Students awarded Masters:  " & EPT_Passed.Masters
frmS.EPT_Masters.Refresh
frmS.EPT_Certificates.Caption = "Students awarded Certificates : " &
EPT_Passed.Certificate
frmS.EPT_Certificates.Refresh


End Sub
```

```
VERSION 5.00
Object = "{6B7E6392-850A-101B-AFC0-4210102A8DA7}#1.3#0"; "COMCTL32.OCX"
Begin VB.MDIForm frmMain
   BackColor       =   &H8000000C&
   Caption         =   "ThesisProject"
   ClientHeight    =   3210
   ClientLeft      =   165
   ClientTop       =   735
   ClientWidth     =   4680
   LinkTopic       =   "MDIForm1"
   StartUpPosition =   3  'Windows Default
   Begin ComctlLib.StatusBar sbStatusBar
      Align           =   2  'Align Bottom
      Height          =   225
      Left            =   0
      TabIndex        =   0
      Top             =   2985
      Width           =   4680
      _ExtentX        =   8255
      _ExtentY        =   397
      SimpleText      =   ""
      _Version        =   327682
      BeginProperty Panels {0713E89E-850A-101B-AFC0-4210102A8DA7}
         NumPanels       =   3
         BeginProperty Panel1 {0713E89F-850A-101B-AFC0-4210102A8DA7}
            AutoSize        =   1
            Object.Width            =   2699
            Text            =   "Status"
            TextSave        =   "Status"
            Key             =   ""
```

```
            Object.Tag              =   ""
         EndProperty
         BeginProperty Panel2 {0713E89F-850A-101B-AFC0-4210102A8DA7}
            Style           =   6
            AutoSize        =   2
            TextSave        =   "1/18/99"
            Key             =   ""
            Object.Tag              =   ""
         EndProperty
         BeginProperty Panel3 {0713E89F-850A-101B-AFC0-4210102A8DA7}
            Style           =   5
            AutoSize        =   2
            TextSave        =   "10:34 PM"
            Key             =   ""
            Object.Tag              =   ""
         EndProperty
      EndProperty
   End
   Begin VB.Menu mnuFile
      Caption         =   "&File"
      Begin VB.Menu mnuFileNew
         Caption         =   "&New"
         Shortcut        =   ^N
      End
      Begin VB.Menu mnuFileOpen
         Caption         =   "&Open"
         Shortcut        =   ^O
      End
      Begin VB.Menu mnuFileClose
         Caption         =   "&Close"
```

```
End
Begin VB.Menu mnuFileBar1
   Caption         =   "-"
End
Begin VB.Menu mnuFileSave
   Caption         =   "&Save"
   Shortcut        =   ^S
End
Begin VB.Menu mnuFileSaveAs
   Caption         =   "Save &As..."
End
Begin VB.Menu mnuFileSaveAll
   Caption         =   "Save A&ll"
End
Begin VB.Menu mnuFileBar2
   Caption         =   "-"
End
Begin VB.Menu mnuFileProperties
   Caption         =   "Propert&ies"
End
Begin VB.Menu mnuFileBar3
   Caption         =   "-"
End
Begin VB.Menu mnuFilePageSetup
   Caption         =   "Page Set&up..."
End
Begin VB.Menu mnuFilePrintPreview
   Caption         =   "Print Pre&view"
End
Begin VB.Menu mnuFilePrint
```

```
   Caption         =   "&Print..."
   Shortcut        =   ^P
End
Begin VB.Menu mnuFileBar4
   Caption         =   "-"
End
Begin VB.Menu mnuFileSend
   Caption         =   "Sen&d..."
End
Begin VB.Menu mnuFileBar5
   Caption         =   "-"
End
Begin VB.Menu mnuFileMRU
   Caption         =   ""
   Index           =   0
   Visible         =   0    'False
End
Begin VB.Menu mnuFileMRU
   Caption         =   ""
   Index           =   1
   Visible         =   0    'False
End
Begin VB.Menu mnuFileMRU
   Caption         =   ""
   Index           =   2
   Visible         =   0    'False
End
Begin VB.Menu mnuFileMRU
   Caption         =   ""
   Index           =   3
```

```
      Visible          =   0   'False
   End
   Begin VB.Menu mnuFileBar6
      Caption          =   "-"
      Visible          =   0   'False
   End
   Begin VB.Menu mnuFileExit
      Caption          =   "E&xit"
   End
End
Begin VB.Menu mnuEdit
   Caption          =   "&Edit"
   Begin VB.Menu mnuEditUndo
      Caption          =   "&Undo"
      Shortcut         =   ^Z
   End
   Begin VB.Menu mnuEditBar1
      Caption          =   "-"
   End
   Begin VB.Menu mnuEditCut
      Caption          =   "Cu&t"
      Shortcut         =   ^X
   End
   Begin VB.Menu mnuEditCopy
      Caption          =   "&Copy"
      Shortcut         =   ^C
   End
   Begin VB.Menu mnuEditPaste
      Caption          =   "&Paste"
      Shortcut         =   ^V
```

```
    End
    Begin VB.Menu mnuEditPasteSpecial
       Caption         =   "Paste &Special..."
    End
End
Begin VB.Menu mnuWindow
    Caption          =   "&Window"
    WindowList       =   -1  'True
    Begin VB.Menu mnuWindowNewWindow
       Caption         =   "&New Window"
    End
    Begin VB.Menu mnuWindowBar1
       Caption         =   "-"
    End
    Begin VB.Menu mnuWindowCascade
       Caption         =   "&Cascade"
    End
    Begin VB.Menu mnuWindowTileHorizontal
       Caption         =   "Tile &Horizontal"
    End
    Begin VB.Menu mnuWindowTileVertical
       Caption         =   "Tile &Vertical"
    End
    Begin VB.Menu mnuWindowArrangeIcons
       Caption         =   "&Arrange Icons"
    End
End
Begin VB.Menu mnuHelp
    Caption          =   "&Help"
    Begin VB.Menu mnuHelpContents
```

```
      Caption         =   "&Contents"
   End
   Begin VB.Menu mnuHelpSearch
      Caption         =   "&Search For Help On..."
   End
   Begin VB.Menu mnuHelpBar1
      Caption         =   "-"
   End
   Begin VB.Menu mnuHelpAbout
      Caption         =   "&About ThesisProject..."
   End
End
End
Attribute VB_Name = "frmMain"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False
Private Declare Function OSWinHelp% Lib "user32" Alias "WinHelpA" (ByVal hwnd&, ByVal
HelpFile$, ByVal wCommand%, dwData As Any)
Private Sub MDIForm_Load()
    Me.Left = GetSetting(App.Title, "Settings", "MainLeft", 1000)
    Me.Top = GetSetting(App.Title, "Settings", "MainTop", 1000)
    Me.Width = GetSetting(App.Title, "Settings", "MainWidth", 6500)
    Me.Height = GetSetting(App.Title, "Settings", "MainHeight", 6500)
'    LoadNewDoc
End Sub

Private Sub LoadNewDoc()
    Static lDocumentCount As Long
```

```
    Dim frmD As frmDocument


    lDocumentCount = lDocumentCount + 1
    Set frmD = New frmDocument
    frmD.Caption = "College Document " & lDocumentCount
    frmD.Show
End Sub


Private Sub MDIForm_Unload(Cancel As Integer)
    If Me.WindowState <> vbMinimized Then
        SaveSetting App.Title, "Settings", "MainLeft", Me.Left
        SaveSetting App.Title, "Settings", "MainTop", Me.Top
        SaveSetting App.Title, "Settings", "MainWidth", Me.Width
        SaveSetting App.Title, "Settings", "MainHeight", Me.Height
    End If
End Sub



Private Sub mnuHelpAbout_Click()
    'To Do
    MsgBox "About Box Code goes here!"
End Sub


Private Sub tbToolBar_ButtonClick(ByVal Button As ComctlLib.Button)
```

```
Select Case Button.Key

    Case "New"
        LoadNewDoc
    Case "New"
        mnuFileNew_Click
    Case "Open"
        mnuFileOpen_Click
    Case "Save"
        mnuFileSave_Click
    Case "Print"
        mnuFilePrint_Click
    Case "Cut"
        mnuEditCut_Click
    Case "Copy"
        mnuEditCopy_Click
    Case "Paste"
        mnuEditPaste_Click
    Case "Bold"
        'To Do
        MsgBox "Bold Code goes here!"
    Case "Italic"
        'To Do
        MsgBox "Italic Code goes here!"
    Case "Underline"
        'To Do
        MsgBox "Underline Code goes here!"
    Case "Left"
```

```
            'To Do
            MsgBox "Left Code goes here!"
        Case "Center"
            'To Do
            MsgBox "Center Code goes here!"
        Case "Right"
            'To Do
            MsgBox "Right Code goes here!"
    End Select
End Sub
```



```
Private Sub mnuHelpContents_Click()

    Dim nRet As Integer

    'if there is no helpfile for this project display a message to the user
    'you can set the HelpFile for your application in the
    'Project Properties dialog
    If Len(App.HelpFile) = 0 Then
        MsgBox "Unable to display Help Contents. There is no Help associated with this
project.", vbInformation, Me.Caption
    Else
```

```
        On Error Resume Next
        nRet = OSWinHelp(Me.hwnd, App.HelpFile, 3, 0)
        If Err Then
            MsgBox Err.Description
        End If
    End If
End Sub


Private Sub mnuHelpSearch_Click()


    Dim nRet As Integer


    'if there is no helpfile for this project display a message to the user
    'you can set the HelpFile for your application in the
    'Project Properties dialog
    If Len(App.HelpFile) = 0 Then
        MsgBox "Unable to display Help Contents. There is no Help associated with this
project.", vbInformation, Me.Caption
    Else
        On Error Resume Next
        nRet = OSWinHelp(Me.hwnd, App.HelpFile, 261, 0)
        If Err Then
            MsgBox Err.Description
        End If
    End If
End Sub
```

```
Private Sub mnuWindowArrangeIcons_Click()
    Me.Arrange vbArrangeIcons
End Sub


Private Sub mnuWindowCascade_Click()
    Me.Arrange vbCascade
End Sub


Private Sub mnuWindowNewWindow_Click()
    'To Do
    MsgBox "New Window Code goes here!"
End Sub


Private Sub mnuWindowTileHorizontal_Click()
    Me.Arrange vbTileHorizontal
End Sub


Private Sub mnuWindowTileVertical_Click()
    Me.Arrange vbTileVertical
End Sub

Private Sub mnuEditCopy_Click()
    'To Do
    MsgBox "Copy Code goes here!"
End Sub
```

```
Private Sub mnuEditCut_Click()
    'To Do
    MsgBox "Cut Code goes here!"
End Sub


Private Sub mnuEditPaste_Click()
    'To Do
    MsgBox "Paste Code goes here!"
End Sub


Private Sub mnuEditPasteSpecial_Click()
    'To Do
    MsgBox "Paste Special Code goes here!"
End Sub


Private Sub mnuEditUndo_Click()
    'To Do
    MsgBox "Undo Code goes here!"
End Sub

Private Sub mnuFileOpen_Click()
    Dim sFile As String


    With dlgCommonDialog
```

```
            'To Do
            'set the flags and attributes of the
            'common dialog control
            .Filter = "All Files (*.*)|*.*"
            .ShowOpen
            If Len(.FileName) = 0 Then
                Exit Sub
            End If
            sFile = .FileName
        End With
        'To Do
        'process the opened file
    End Sub


    Private Sub mnuFileClose_Click()
        'To Do
        MsgBox "Close Code goes here!"
    End Sub


    Private Sub mnuFileSave_Click()
        'To Do
        MsgBox "Save Code goes here!"
    End Sub


    Private Sub mnuFileSaveAs_Click()
        'To Do
        'Setup the common dialog control
```

```
    'prior to calling ShowSave
    dlgCommonDialog.ShowSave
End Sub


Private Sub mnuFileSaveAll_Click()
    'To Do
    MsgBox "Save All Code goes here!"
End Sub


Private Sub mnuFileProperties_Click()
    'To Do
    MsgBox "Properties Code goes here!"
End Sub


Private Sub mnuFilePageSetup_Click()
    dlgCommonDialog.ShowPrinter
End Sub


Private Sub mnuFilePrintPreview_Click()
    'To Do
    MsgBox "Print Preview Code goes here!"
End Sub


Private Sub mnuFilePrint_Click()
    'To Do
```

```
    MsgBox "Print Code goes here!"
End Sub


Private Sub mnuFileSend_Click()
    'To Do
    MsgBox "Send Code goes here!"
End Sub


Private Sub mnuFileMRU_Click(Index As Integer)
    'To Do
    MsgBox "MRU Code goes here!"
End Sub


Private Sub mnuFileExit_Click()
    'unload the form
    Unload Me
End Sub

Private Sub mnuFileNew_Click()
    LoadNewDoc
End Sub
```

```
VERSION 5.00
Begin VB.Form frmDocument
   Caption         =   "frmDocument"
   ClientHeight    =   3195
   ClientLeft      =   60
   ClientTop       =   345
   ClientWidth     =   4680
   ControlBox      =   0   'False
   LinkTopic       =   "Form1"
   MDIChild        =   -1  'True
   ScaleHeight     =   3195
   ScaleWidth      =   4680
   Begin VB.Label Degree
      Caption          =   "Degree: "
      Height           =   372
      Left             =   1920
      TabIndex         =   3
      Top              =   960
      Width            =   2532
   End
   Begin VB.Label Quarter
      Caption          =   "Quarter:"
      Height           =   252
      Left             =   120
      TabIndex         =   2
      Top              =   1320
      Width            =   2052
   End
   Begin VB.Label RecNum
      Caption          =   "Record #:"
```

Listing 3 - frmDocument.frm

```
      Height          =   252
      Left            =   120
      TabIndex        =   1
      Top             =   960
      Width           =   1092
   End
   Begin VB.Label Status
      Caption         =   "Status Window"
      Height          =   495
      Left            =   240
      TabIndex        =   0
      Top             =   240
      Width           =   4215
      WordWrap        =   -1  'True
   End
End
Attribute VB_Name = "frmDocument"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False
Private Sub Form_Load()
    Form_Resize
End Sub

Private Sub Form_Resize()
    On Error Resume Next
    txtText.Move 100, 100, Me.ScaleWidth - 200, Me.ScaleHeight - 200
End Sub
```

```
VERSION 5.00
Begin VB.Form frmSummary
   Caption         =   "Student Information Summary"
   ClientHeight    =   4125
   ClientLeft      =   45
   ClientTop       =   270
   ClientWidth     =   8055
   LinkTopic       =   "Form1"
   ScaleHeight     =   4125
   ScaleWidth      =   8055
   StartUpPosition =   3  'Windows Default
   Begin VB.Label EPT_Certificates
      Caption         =   "Certificates Awarded"
      Height          =   255
      Left            =   4200
      TabIndex        =   15
      Top             =   2280
      Width           =   3855
   End
   Begin VB.Label EPT_Masters
      Caption         =   "Masters Awarded"
      Height          =   255
      Left            =   4200
      TabIndex        =   14
      Top             =   2040
      Width           =   3855
   End
   Begin VB.Label EPT_Baccalareates
      Caption         =   "Baccalareates awarded"
      Height          =   255
```


Listing 4 - frmSummary.frm

```
   Left            =   4200
   TabIndex        =   13
   Top             =   1800
   Width           =   3855
End
Begin VB.Label EPT_P101
   Caption         =   "Passed English 101"
   Height          =   255
   Index           =   1
   Left            =   4200
   TabIndex        =   12
   Top             =   1560
   Width           =   3855
End
Begin VB.Label EPT_Passed
   Caption         =   "Students who passed the EPT:"
   Height          =   255
   Left            =   4080
   TabIndex        =   11
   Top             =   1320
   Width           =   3135
End
Begin VB.Label Certificates_NoPrec
   Caption         =   "Certificates Awarded"
   Height          =   255
   Left            =   240
   TabIndex        =   10
   Top             =   2880
   Width           =   3975
End
```

```
Begin VB.Label Certificates
   Caption          =   "Certificates Awarded"
   Height           =   255
   Left             =   240
   TabIndex         =   9
   Top              =   1560
   Width            =   3975
End
Begin VB.Label Masters_NoPrec
   Caption          =   "Masters Awarded"
   Height           =   255
   Left             =   240
   TabIndex         =   8
   Top              =   2640
   Width            =   3975
End
Begin VB.Label Bachelors_NoPrec
   Caption          =   "Baccalareates awarded"
   Height           =   255
   Left             =   240
   TabIndex         =   7
   Top              =   2400
   Width            =   3975
End
Begin VB.Label Skipped_P101
   Caption          =   "Passed English 101"
   Height           =   255
   Left             =   240
   TabIndex         =   6
   Top              =   2160
```

```
   Width           =   3975
End
Begin VB.Label Skipped_PreC
   Caption         =   "Skipped Precollegiate Classes"
   Height          =   255
   Left            =   120
   TabIndex        =   5
   Top             =   1920
   Width           =   3975
End
Begin VB.Label TookPrec_P101
   Caption         =   "Passed English 101"
   Height          =   252
   Index           =   0
   Left            =   240
   TabIndex        =   4
   Top             =   840
   Width           =   3852
End
Begin VB.Label Prec_Taken
   Caption         =   "Took Precollegiate Classes"
   Height          =   252
   Index           =   0
   Left            =   120
   TabIndex        =   3
   Top             =   600
   Width           =   3972
End
Begin VB.Label Masters
   Caption         =   "Masters Awarded"
```

```
      Height          =   252
      Left            =   240
      TabIndex        =   2
      Top             =   1320
      Width           =   3852
   End
   Begin VB.Label Bachelors
      Caption         =   "Baccalareates awarded"
      Height          =   252
      Left            =   240
      TabIndex        =   1
      Top             =   1080
      Width           =   3852
   End
   Begin VB.Label Prec_Class
      Caption         =   "Students taking the EPT:"
      Height          =   252
      Left            =   960
      TabIndex        =   0
      Top             =   240
      Width           =   3132
   End
End
Attribute VB_Name = "frmSummary"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False
```

ANNOTATED BIBLIOGRAPHY

California. California State University. Committee on Educational Policy. Report of the Subcommittee on Remedial Education, July 18-19. Long Beach: 1995. This committee report will be used to show the pending changes to university policy regarding underprepared students. It contains information indicating that the English Placement Test, which contains an impromptu written essay requirement, will change from an assessment and placement tool to one that will not only assess and place students at the university level, but identify and subsequently allow exclusion to those students who are found to lack college-level English skills.

California. California State University, San Bernardino Bulletin. Vol. 29 No. 1. June. San Bernardino: 2000. The Bulletin will be used to document information about the English Placement Test currently in use at the university. It contains the information on who must take the English Placement Test for admission to the university, when it must be taken, and what the results mean in terms of placement in English classes at the university.

Elbow, Peter. What is English?. New York: MLA, 1990. This book is cited and the citation is discussed as Elbow's viewpoint on the singular nature of timed impromptu essay exams and their detriment to the learning environment. It contains Elbow's argument for less, not more, timed impromptu essay writing as an assessment instrument.

_____. "Foreword." Portfolios: Process and Product. Ed. P. Belanoff and M. Dickson. NH: Boynton/Cook/Heinemann, 1991. This foreword is cited and discussed to detail Elbow's argument against the timed impromptu essay exam. Elbow believes this type of exam is an artificial construct that eliminates the writing process and thus gives a distorted and inaccurate view of the student's writing.

Greenberg, Karen L. "Research on Basic Writers: Theoretical and Methodological Issues." A Sourcebook for Basic Writing Teachers. Ed. Theresa Enos. New York: Random House, 1987. This essay is cited and discussed in support of Elbow's and Crowley's viewpoints on the detriments of writing assessment. It contains information about test anxiety and its effects upon student writing.

Newman, Taft. <tnewman@wiley.csusb.edu> "REPLY: Definition of At-Risk Students." E-Mail. 8 Nov. 1996. Personal e-mail. (8 Nov. 1996). The information contained in this electronic mail message will form the basis for my definition of at-risk students. It contains the criteria under which our Equal Opportunity Program office evaluates students for risk factors and admission under special circumstances.

Rose, Mike. Lives on the Boundary: The Struggles and Achievements of America's Underprepared. New York: Macmillan, Inc.-The Free Press, 1989. This book will be cited and discussed to point out the perils of misplacement in inappropriate courses for students. It contains the personal account of Mike Rose, former director of writing at UCLA, and details his experiences with misplacement in lower-level classes during his high school years.

_____. "The Language of Exclusion: Writing Instruction at the University." College English. 47.4/April (1985): 341-359. This essay will be used to show how our thinking about underprepared students is colored by the vocabulary commonly used to discuss these students and their situation. Rose wants to make us aware of the nature of our speech, and to bring about change in the way we view these students by changing our way of speaking about them.

Shaughnessy, Mina P. Errors & Expectations. New York: Oxford University Press, 1977. This seminal text on Shaughnessy's work with basic writers contains much information about how such students write essays. I plan to incorporate her observations into my

discussions about the essay portion of the EPT and its effects upon at-risk students.

White, Edward M., William D. Lutz, and Sandra Kamusikiri. Assessment of Writing: Politics, Policies, Practices. New York: MLA, 1997. This book is cited and discussed in regards to almost all aspects of writing placement assessment. It is especially used to show the influence that "testing firms and governing bodies" have on writing assessment issues. It also points out the often conflicting wants and needs that students have regarding the writing assessment process.

White, Edward M. "Power and Agenda Setting in Writing Assessment." Assessment of Writing. New York: MLA, 1997. This essay is cited and discussed to show the influence that "testing firms and governing bodies" have on writing assessment issues. It also points out the conflicting wants and needs that students, faculty and administrators have regarding the writing assessment process.

_____. "An Apologia for the Timed Impromptu Essay Test." College Composition and Communication. 46.1/February (1995): 30-45. This essay is discussed and cited to support the need for the particular type of writing assessment employed in the English Placement Test at the university. Timed impromptu essay writing is discussed with regards to its appropriateness in evaluating and placing students.

_____. "The Importance of Placement and Basic Studies: Helping Students Succeed Under the New Elitism" Journal of Basic Writing. Vol. 14, No. 2 (1995): 75-84. This article is cited and discussed to provide supporting evidence in favor of the impromptu essay exam as a valid instrument for writing assessment. It contains information on two studies which show not only that students benefit in improved expertise from assessment and subsequent placement in appropriate classes, but that they benefit by remaining enrolled in the university for longer periods of time.

WORKS CITED

Anderson, Larry. "Time and Writing: Institutional Forces and the Shape of Writing Pedagogy." The Writing Instructor. Fall, 1994: 25-37.

California. California State University. Committee on Educational Policy. Report of the Subcommittee on Remedial Education, July 18-19. Long Beach: 1995.

California. California State University Home Page. 23 Jan. 2001. CSU EPT/ELM Information Bulletin. http://www.ets.org/csu/.

California. California State University, San Bernardino Bulletin. Vol. 29 No. 1. June. San Bernardino: 2000.

Carter, Chelsea J. "Fewer Cal State freshmen need remedial math." Antelope Valley Press 25 Jan. 2000: A5.

"Community colleges fight budget cuts." Antelope Valley Press 15 Aug. 2001: A5.

Elbow, Peter. What is English? New York: MLA, 1990.

_____. "Foreword." Portfolios: Process and Product. Ed. P. Belanoff and M. Dickson NH: Boynton/Cook/Heinemann, 1991.

_____. "Ranking, Evaluating, and Linking: Sorting Out Three Forms of Judgment." College English 55 (1993): 187-206.

Greenberg, Karen L. "Research on Basic Writers: Theoretical and Methodological Issues." A Sourcebook for Basic Writing Teachers. Ed. Theresa Enos. New York: Random House, 1987.

Jones, Joan and Ronald Kaplan. The Impact of Writing Placement Testing and Remedial Writing Programs on Student Ethnic Populations at Oxnard College. Oxnard: Oxnard College, 1991.

Newman, Taft. <tnewman@wiley.csusb.edu> "REPLY: Definition of At-Risk Students." E-Mail. 8 Nov. 1996. Personal e-mail. (8 Nov. 1996).

Porter, Al. Mercer County Community College Remedial Program Assessment, August 1988. Two Year Follow-Up of the Fall 1986 Cohort. Trenton: Mercer County Community College, 1988.

Rose, Mike. Lives on the Boundary: The Struggles and Achievements of America's Underprepared. New York: Macmillan, Inc.-The Free Press, 1989.

_____. "The Language of Exclusion: Writing Instruction at the University." College English. 47.4/April (1985): 341-359.

Shaughnessy, Mina. Errors and Expectations. New York: Oxford UP, 1977.

Shor, Ira. "Our Apartheid: Writing Instruction & Inequality." Journal of Basic Writing. 16.1/January (1997): 91-104.

White, Edward M., William D. Lutz, and Sandra Kamusikiri. Assessment of Writing: Politics, Policies, Practices. New York: MLA, 1997.

White, Edward M. "Power and Agenda Setting in Writing Assessment." Assessment of Writing. New York: MLA, 1997.

_____. Teaching and Assessing Writing, 2nd ed. San Francisco: Jossey-Bass, 1994.

_____. "Writing Assessment Beyond the Classroom: Will Writing Teachers Play a Role?" Composition in the Twenty-First Century: Crisis and Change. Eds. Bloom, Lynn Z., Donald A. Daiker and Edward M. White. Carbondale: Southern Illinois University Press, 1996.

_____. "An Apologia for the Timed Impromptu Essay Test." College Composition and Communication. 46.1/February (1995): 30-45.

_____. "The Importance of Placement and Basic Studies: Helping Students Succeed Under the New Elitism." Journal of Basic Writing. Vol. 14, No. 2 (1995): 75-84.

_____. "The Opening of the Modern Era of Writing Assessment." College English. Vol. 63, No. 3 (2001): 306-320.